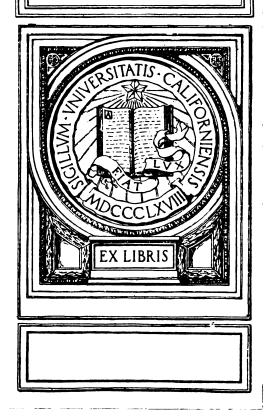


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The Medical Herald

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The Kansas City Medical Index-Lancet

An Independent Monthly Magazine

Vol. XXXIX.

JANUARY 15, 1920

No. 1



THYROID RESPONSE TO OVERSTRAIN* GEORGE H. HOXIE, M. D., Kansas City, Mo.

1. The Cause of Thyroid Dysfunction—For the last generation the function of the thyroid has been popularly considered that of the detoxicator par excellence of the body. Therefore the invasion of infectious agents and the absorption of toxins (as from drinking water) have been considered the exciting causes of reactive (compensatory) thyroid enlargement of hypofunction, or even of hyperthyroidism.

Later, as the complexity of the endocrine balance began to be appreciated, compensatory hyperplasia and hypertrophy because of the activity of the sex glands was spoken of. Thus the goitres of puberty and pregnancy were regarded as compensatory.

Then after Cannon's study of the adrenals and their antagonism to the thyroid, an added conception of endocrine reaction entered.

Thus Cannon attributed hyperthyroidism to the lowering of the threshold of thyroid activity brought on by exaggerated function—by increased discharge into the bloodstream of the adrenals. Since this result could occur from excessive emotionalism and nervous overstrain, the theory fitted in well with the facts of every day observation. Then the matter of fatigue, as emphasized by Rogers (Archives Int. Med., 1919; 23:498), showed that both the adrenals and the thyroid might be involved, in an attempt to compensate for the exhaustion of the end plates in cases of prolonged exertion, as well as from debilitating disease.

2. Exophthalmic Goitre and Thyroid Hyperfunction—The matter of endemic goitre has received some illuminations from the work of Kert in his studies of the recruits of the northwestern

*Read before the Medical Society of the Missouri Valley at Des Moines, Iowa, Sept. 18, 1819.

states. He confirms the opinion that goitre is more common in Washington and Oregon than in the neighboring states. He shows, too, that this type of goitre enters only casually into the matter of neurocirculatory asthenia. On the other hand, Wearn and Sturgis (Archives Int. Med., 1919:24:247) show that a large majority of the recruits suffering from NCA respond to the adrenalin test of Goetsch for thyroid hyperfunction. Hence a distinction must be made between thyroid hyperfunction.

Janney (Arch. Int. Med., 1918:22:187) has shown that all cases of exophthalmic goitre are not cases of thyroid hyperfunction. And the now well known fact that the thymus is frequently (60 per cent) enlarged in exophthalmic goitre, makes it necessary to revise our nomenclature and make a new definition of this disease.

3. Observations in France—In France, last year, many cases of thyroid enlargement and thyroid hyperfunction appeared among the soldiers as the secondary reaction to exhaustion, and to the debilitation resulting from disease. This confirms the theory that thyroid hyperfunction may be a compensatory phenomenon.

The sequence of events in these cases was somewhat as follows: The patient entered the hospital with a blood pressure of 70 diastolic and 90 to 100 systolic. The heart action was not clear and sharp. That is, one heard systolic murmurs at the second and third left interspace. The blood and urine were usually negative. The breath sounds were usually harsh, and there was frequently the evidence of enlargement of the peribronchial lymph glands.

The blood pressure gradually rose until in three or four weeks the diastolic might be 100 and the systolic 160. With this there was urinary frequency and nocturia but no albuminuria. The pulse showed a constant tendency to tachycardia. A tremor of the fingers would then appear. There was generally an increase in the size of the thyroid. In the majority of cases there was an intermittent diarrhea, a tendency to sweating was marked; and frequent rises in temperature were noted.

4. Relation to Neurocirculatory Asthenia—These symptoms are those of hyperthyroidism, rather than those of a true N. C. A., a fact more evident from the history of the soldiers. For these hyperthyroid men had been energetic and efficient, and had not had to drop out on hikes nor had they been trying to spare themselves, as the N. C. A.'s regularly did.

Since the N C. A. or "effort syndrome" is new, there is a tendency to make it include too much; and we find grouped under it everything from neurasthenia to sympatheticotonia. To my mind it is axiomatic that there is a definite limit of demarcation between it and hyperthyroidism. To make it clear it may become necessary to establish new objective criteria for hyperthyroidism. Therefore I welcome the adrenin test of Goetsch, the sugar utilization test, and the estimation of the basal metabolism in the clinical calorimeter. The result of their use will be the marking out of many cases of hyperthyroidism such as we saw in France; and the acceptance of the postulate that the thyroid responds by increased activity not only to infections, and endocrine upsets, but also to serious overstrain and exhaustion.

5. **Prophylaxis**—A practical conclusion from all these facts would be the justification of the administration of the iodides to patients suffer ing from exhaustion (either from overstrain or disease) as a prophylactic measure with the hope that it would prevent the compensatory hyperplasia of the thyroid, somewhat as Kimball and Marine did in the Akron schools (Arch. Int. Med., 1918, 22:41).

715 Bryant Building.

A BRIEF REPORT OF THE MEDICAL WORK OF THE AMERICAN RED CROSS COMMISSION TO PALESTINE

June 22, 1918 to June 1, 1919.

D. V. ASKREN, M. D., Fayum, Egypt. (Captain P. M. O., Jerusalem)

In writing the report of the medical department of the American Red Cross Commission to Palestine I feel absolutely unable to do justice to the subject, therefore I hope that the many deficiencies will be overlooked.

The American Red Cross Commission to Palestine had its inception in the fertile brain of Dr. E. St. John Ward, Professor of Surgery in the American Medical College, in Beirut, Syria, a branch of the Syrian Protestant College.

Before America's entry into the war, prompted by the humane instincts of the busy physician he aided in the reorganization of the Red Crescent service of the Turkish army this organization in the Mohammedan world corresponds to the Red Cross of the Christian world.

His duties in connection with this organiza-

tion lay largely in Palestine, and during the first Turkish attack on the Suez Canal he was in command of the Turkish Base Hospital at Beersheebaon, the southern frontier of Palestine.

Due to the fact of his having been a missionary in Arabia and in Syria proper for many years, he had an exceptionally good knowledge of the native population of Syria and Palestine, and this knowledge, coupled with his observations of the condition of the inhabitants under the Turkish rule acquired during his work in Lower Palestine with the Red Crescent, showed him how neces-



CAPT. D. V. ASKREN

sary it would be for some relief organization to begin work as soon as possible after the conquering of the country by the Allied armies.

Col. Ward, in organizing his first unit in America, was particularly fortunate in knowing of the large number of missionaries, both lay and medical, who had been ordered out of Asia Minor by the Turks on America's entry into the war, and who, after a rest in the United States, were ready, to return to their fields of labor or any other fields where they could be of service in relieving the distress in the Near East.

These missionaries in accepting commissions

with the Unit to Palestine, formed an exceedingly valuable nucleus around which the Unit was built as they were thoroughly conversant with the language and customs of the peoples with whom the unit was to work.

It should be stated here that while these members were missionaries they did not do mission work in Palestine unit, but did Red Cross work purely and simply.

On arrival in Jerusalem, almost a year ago, the unit was assigned by the occupied enemy territory administration a group of buildings known as the Russian buildings for the base of the unit's activities.

These buildings comprised a large group of rooms built around a cross shaped chapel known as the Hospice; a second building originally the Russian Hospital, and a third set of buildings in an adjoining compound which were originally the residence and offices of the Russian consul and the house of his dragoman.

These buildings are beautifully located just to the west of the city proper, and through the installation of good American sanitation with proper protective hygienic measure, the unit has been remarkably free from any serious illness among its members.

The buildings had been used by the Turks for hospital purposes and the condition of the buildings when taken over can be better imagined than described, and I shall not attempt any extended description of the cleaning beyond saying that it was successfully performed by members of the unit in the tropical heat of July.

Work was very speedily put under way and the buildings were alloted as follows: The Hospice became the base home where all members have had a bit of American hospitality out where most of the members in Jerusalem have resided during their service with the unit.

The Russian Hospital was made into the surgical hospital and also became the base supply warehouse for drugs and surgical supplies.

The consular building was converted into a children's hospital in the first floor and the ground floor was made into a polyclinic where free clinics were conducted to relieve the distress of a population that had been for many months unable to secure any medical care or medicine.

As this report is purely descriptive of the medical work and written by one who joined the unit almost six months after the work was started, much of the description of the early activities will necessarily be hearsay.

During the time requiring to get the base hospitals ready several members of the unit were assigned to out duties, some to hospitals ready established, notably at Jaffa, where an infectious hospital was temporarily staffed by a Red Cross physician and nurse and others went out with improvised field equipment and opened clinics

and hospitals at Mejdel, Wadi Surrar and Ludd and Ramleh.

These clinics did wonderful service down in the coastal plain in August and September, under the most trying conditions in a broiling hot climate.

Later in the fall, when military operations were again resumed, it was possible to establish work in Haifa and Acre on the coast, and a short time after that to push workers over across the Jordan to Es Salt where a large number of the Arab population were in an exceedingly needy condition.

In these three stations it was possible to use fairly satisfactory buildings for hospitals though much equipment and all drugs and expendables had to be supplied from the base.

During all the work the very pleasant cooperation between the occupied territory administration and the Red Cross can be best illustrated by a brief history of the outbreak of cholera at Tiberias on the Sea of Galilee in the month of October.

This disease is one of the most dreaded in the East, and is particularly difficult to control among a Mohammedan people owing to the fact that the Mohammedan religion requires five daily ablutions before each prayer, and the devotee repairs to running living water, if possible,

Tiberias lies on the Sea of Gallilee about five hundred feet below the sea level, and is one of the hottest spots imaginable during the sum-

It has a large Jewish population, and its sanitation is not modern in any sense of the word.

Upon discovery of the outbreak of cholera, the Red Cross was asked by the military authorities to aid in combating the epidemic by sending 36 beds, 2 doctors, 2 A. R. C. nurses, 2 native nurses, an interpreter and an expert laboratory worker.

The epidemic lasted three weeks, and during this time this small staff successfully treated seventy-three men, one hundred and two women, and thirty-six children, a total of two hundred and ten people, that would have probably died had it not been for the efficient treatment and care that they received through the Red Cross.

The epidemic, by the very efficient sanitary measures of Major Sibley, R. A. M. C., late of the London School of Tropical Medicine, was confined to one portion of the city that had been drawing its water from the Sea of Galilee and by supplying a proper water and patrolling the beach the epidemic was very speedily stamped out

The medical relief soon settled down to two centers, one comprising Acre and Haifa for the coastal plains and Jerusalem for the mountain dwellers, with Es Salt reaching much of the population east of the Jordan though Jerusalem

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drew large numbers of patients from the country east of the Jordan particularly south of the Es Salt region.

Jerusalem being the largest city of Palestine, was the seat of the greatest activities of the unit, and the five workrooms, the Russian women on Mount of Olives and at Ain Karim, and the three orphanages were placed under daily medical supervision and clinics held in each institution where all needing treatment were supplied free medicines.

The orphanages and other relief work of a sister organization, the Syrian and Palestine relief fund which had preceded the Red Cross into the field were taken over by the medical staff and daily clinics conducted.

The various clinics and dispensaries treated in the past eleven months 23,753 men, 46,285 women, and 69,499 children, a grand total of 139,537 patients who received advice and free medicines.

Most of these patients were of the very poorest and most needy classes and they form perhaps the brightest spot in the medical history of the unit

A slight digression should be made to mention that most of the cities and villages of Palestine are very heavily infected with malaria, which owing to the tight blockade maintained against Turkey and her allies, made it almost impossible to obtain quinine and as no attempt was made by the Turkish sanitary authorities to control the disease by screening standing water or destroying the mosquitoes in the houses, the disease was practically universal.

From personal experience in the clinics and hospital fully 75 per cent of the patients presented palpable spleens showing an almost complete saturation of the population, both young and old.

The present military authorities have been fully alive to the situation and have closed, screened or treated all the cisterns of Jerusalem. a total of about three thousand, and had the Red Cross remained there would have been instituted a very active campaign under the able management of Major Groeniger, the sanitary expert of the unit.

The pumps and piping necessary to close all these cisterns did not arrive, however, until after our orders had been received to withdraw from the field, but the plan was adopted by the military authorities and the pumps purchased so that we have the satisfaction of knowledge that the good work goes on and endemic malaria will shortly cease to exist in Jerusalem; thanks purely to the Red Cross and its sanitary engineer.

Among the illiterate population literature does not really reach many of the people, therefore practically no attempt was made to reach them by such a means, though one malarial preventative measure was printed and distributed.

The malarial situation had been met and relieved and the enlarged spleen is not so often seen now in the clinics dealing with the Jerusalemites though many of the patients from the villages are still malarial.

The writer feels that this malarial situation had been so largely relieved through two factors, the preventative malarial measures of the military authorities and the free distribution of quinine to all by the Red Cross.

The two base hospitals should receive a brief mention, and I therefore attach the report of the Children's Hospital, written by the lady physician, Dr. Lawrence, who opened it and was in charge during its entire history; she was also in charge of the children's clinic.

The work of this lady has been one of the ablest, self sacrificing and efficient in the unit, and thanks to her very skillful treatment and watchful care hundreds of children in Jerusalem and surrounding villages have been tided over an acute period in their lives and will now live to be useful citizens of this country.

Miss Spelman, the matron of the hospital, and Miss Haslam, assistant matron, by their watchful care over the native staff of nurses and their skillful nursing of the patients in the hospital made it possible for the doctor to achieve such wonderful results with the poor, ill, more than half starved babies that came into the hospital.

The second base hospital in the old Russian hospital building, was made into a surgical hospital at the desire of the military authorities, as at the time there were no other institutions doing surgery among the civilian population and its history contains many cases of mangled farmers and children injured through the accidental explosion of shells and other explosive weapons lost by the armies in the open warfare of this country that prevented the close salvaging of the battlefields that obtained in the trench warfare of Europe.

This hospital was opened on the twenty-third of September, 1918, and was turned over to the military Public Health Department of Jerusalem on the first of May, 1919, having had an existence as a Red Cross institution of exactly seven months, as last patient was admitted on the twenty-third of April.

This hospital was staffed by Red Cross physicians, one a lady, Dr. Hall, an A. R. C nurse, Miss MacQuaide as matron with A. R. C. nurses as ward nurses in charge of the staff of native nurses who were secured from local sources, and while very willing, required very much training and continual supervision; the last member of the hospital staff was Miss Wood, the A. R. C. nurse in charge of the operating room.

During the seven months of its existence this



hospital treated a total of 668 patients of whom 402 were surgical and 260 were medical, with a total death list of only 25, giving a death rate of only 3.7 per cent.

This is a really wonderful record when it is considered that most of the cases were drawn from the poorest and underfed classes with their resistance worn down by the four years of privation they had endured, and I think this result was due to two factors:

The efficient dieting and nursing of Miss MacQuaide and her staff of nurses.

The second factor is due to Miss Wood in the operating room, who made sure every detail of the aseptic technique which we were able to employ in all surgical operations and dressings.

The total number of operations performed were 286, and comprised all classes of surgery, but particularly were abdominal and bomb cases sent to this hospital.

Dr. Hall's services were invaluable in the wards as the arranging of all the pathological speciments devolved on her as well as general wounds and dressings, but her best work was in connection with two gynecological clinics where she did very excellent work.

Two medical men come forcibly to my mind in connection with the work in Jerusalem, and they are Major Dodd, who was chief of the entire unit medical staff and to whose tactful and skillful arranging of the assignments is due the large results achieved in the clinics and dispensaries; the second member is Capt. Marden, upon whom devolved the hospital and to whose skill and mature judgment is due the professional results achieved and the reputation acquired among the people of this portion of Palestine.

It was with great regret that these two men left the unit early in February to go further north to open up new fields of immediate relief in districts where the need was more acute.

The work of the dispensaries was very satisfactorily performed by the various medical men, but especially so by those members who had not previously been in the country and were compelled to take all case histories through an interpreter, many of whom had but a fair knowledge of elemental English.

The spirit of co-operation between the various medical men was very great, and the mutual benefit obtained through the interchange of the fresh western ideas and the more mature clinical knowledge of those who had been previously in the country led to results of great value to both physicians and patients.

The refugee situation required a passing comment as they were partially a medical problem.

A disinfecting plant was established, and 4,992 refugees were passed through the cleansing process, being given new clothing and bedding, and after a second medical examination were segre-

gated into classes to prevent double inspections, and after ten clean days of isolation were passed into the clean classes.

Scabies and relapsing fever were the two most prevalent diseases among the refugees who were largely Armenian in nationality and who have now been practically all repatriated by the military authorities.

This refugee work was assigned to one of the A. R. C. nurses, Miss Ellen Hamilton, and she deserves great credit for the heroic manner in which she worked day after day among these refugees coming in the most filthy condition and swarming with vermin.

About the last of February, at a conference between Gen. Money and members of his staff of the occupied enemy territory administration and Col. Finley and Ward and Major Stoner and Reed of the Red Cross, it was decided that the greatest good would accrue to the country as a permanent monument to the Red Cross should the medical work with the equipment of the hospitals at Haifa, Acre and the two hospitals in Jerusalem be given to the medical department of the O. E. T. A.

Therefore, early in March, the preparation of the various inventories and the negotiations necessary for the arranging of the various details of the turn over began and it is my pleasure to record a very pleasant spirit of cooperation on the part of the military authorities in aiding to make all details work out smoothly and without friction.

The pathological laboratory was turned over on the fifteenth of April on which also Haifa and Acre were turned over owing to the sudden recall of Dr. Greely, the A. R. C. P. M. O. in charge of the two hospitals.

The laboratory and its equipment divided by the military authorities and part of it sent to Haifa giving two laboratories from the one stock. This laboratory was invaluable in diagnosing the peculiar diseases of this country and the services of Miss Hamilton were very much appreciated not only by the A. R. C. physician but also by all physicians of Jerusalem, both civilian and military.

On May the first the surgical hospital in the old Russian hospital building passed over to the medical department of the O. E. T. A. without a hitch, our staff leaving in the morning and the other staff coming at the same time though transfer of most of the patients from the Government Hospital had been proceeding for several days previously.

The Children's Hospital was transferred on the first of June, finally closing almost all the medical activities of the Red Cross as the workrooms and dispensaries had been closing gradually throughout the entire month.

Likewise as many of the children from the

orphanages as possible had been sent home to relatives wherever they were willing to assume responsibility for the child and such others as had no relatives able to take care of them were concentrated in the Syrian Orphanage.

The Syrian and Palestine Relief Fund Institution and the Syrian Orphanage continue under the care of the Red Cross medically until the end of June when most, if not all, will be closed the Syrian Orphanage will, however, pass over under the control of the American Relief Committee in the Near East.

In concluding this report I would like to record the inestimable good that has been bestowed on Palestine and Syria by the Red Cross in the eleven months of its service here.

It has been with sincere regret that we have watched our work close down, and we each wish that we could justifiably continue the good work we have been carrying on.

I wish to record the fine spirit of fraternity and fellowship we have enjoyed among ourselves and our exceedingly pleasant relations with our British friends and associates in the O. E. T. A., in both social and business relations.

A brief summary of the work for the children, medically:

These statistics differ very slightly from those in the doctor's report, evidently due to an error in transcribing.

The number of beds in the Children's Hospital were 30, and 101 patients were treated, of which 71 were cured, with a death list of only 15, which considering the condition of the babies on admission is a testimony to the care and feeding that they received in the hospital.

The Children's Clinic, of which only one was held, treated a total of 2,462 children actually ill, but 12,601 cases, visited the clinic of whom 7,118 received tins of milk which in many cases was much more essential than medicine, as the war killed off practically all the milk animals of the country, so that milk was almost unobtainable.

At the present time milk is selling at 30 cents a small quart, which is very high for a grazing country as this one is.

COUNTRY as this one is.

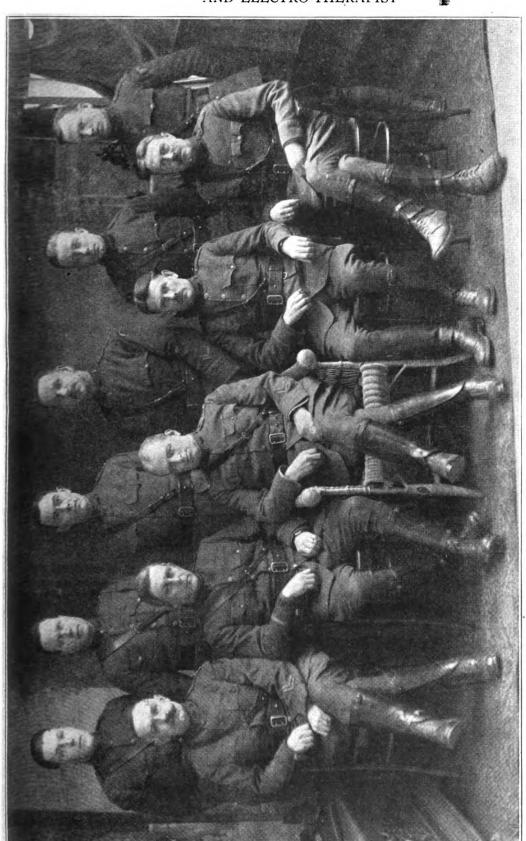
EDITOR'S NOTE—This very interesting report was written by a former St. Joseph boy, who will be remembered by many Herald readers. He was graduated from the Central Medical College, class of '96, and has practiced for nineteen years in Egypt. Dr. Askren writes us he volunteered as soon as the United States went into the war, but did not succeed in being accepted, so he joined the American Red Cross in Palestine, where he was elevated to the office of chief surgeon and served for six months. Dr. Askren says that his children were still in Egypt when the trouble broke out, and his wife had returned to get their summer clothes for the family. She was attacked at Wastaand, had a terrible experience (which was written up in the Globe-Democrat), barely escaping with her life. Dr. Askren wishes to be remembered to all his old friends and classmates and hopes to visit the United States at an early date.

The indications for the use of physostigma are nearly the same as those for agaricus.

Reconstruction in the Army-Col. H. M. Evans gave an excellent illustrated talk at the recent meeting of the Missouri Valley Medical Society, at Des Moines, on this subject. The big thing in the government's vocational work for disabled former soldiers now is supervision of the men in training in the various schools. The work is divided into three periods, all of which overlap more or less. The first was the advisory period, now nearly completed. It took the disabled men as they were released, advised them as to future activity, and started them in vocational work in the various schools. The second covers their school period, and the third takes them when their courses are completed and gives them "placement" training in the jobs that will best serve to carry them on. (W. I. Potter, 412 Mass. Bldg., is in charge of the placement work in Kansas City.) The men have been recommended by the government for certain periods in school The training section sees that they are satisfied where they are, that they receive proper atten-tion, that their disability does not unfit the for their course—is a sort of a substitute father for them, in fact. Men in training are allowed if single, \$80 a month, their tuition, books and the like, and \$115 if they are married. The Federal Board for Vocational Education has and office in Kansas City under the charge of Mt. W. M. Godwin. Kansas City employers have almost without exception, been eager to help int, placing the men after their training, or to give them part time jobs during training.

A New Specialty Wanted by a Prominent Firm-The Marvel Company, manufacturers of the Marvel "Whirling Spray" Syringe, is looking for an ethical preparation or specialty that can be introduced to physicians or to the public, through advertising. Nearly every physician has a formula or an idea of an instrument or appliance which he thinks would be of great benefit to mankind and prove profitable to the manufacturer but is not in a position to exploit it. The Marvel Company will consider the purchase of same either for cash or on a royalty basis, providing the preparation apeals to them. Formulae for the ordinary household remedies will not be considered. Address Marvel Company, No. 25 West 45th St., New York City.

Loss of Nurses Through Influenza—According to figures made public by the Red Cross headquarters at Washington, more than 200 American Red Cross nurses have died of influenza contracted while ministering to soldiers stricken with the disease. It is also reported that there are returning to America many New York Red Cross nurses who have contracted tuberculosis at the front and whose condition demands immediate treatment.



MEDICAL STAFF OFFICERS—HEADQUARTERS 42D (RAINBOW) DIVISION

American Expeditionary Forces, Armyof Occupation, with Home Addresses.

First row—sitting, from left to right: Captain Edonard J. Dubols, Indianapolis Ind. (Asst. Division Sanitary Inspector): Major Alpha J. Campbell, Denver. Colo (Asst. Division Surgeon): Colonel David S. Fairchild, Jr. Clinton, Iowa (Division Surgeon); Major Angus MacIvor, Marysville, Ohio (Division Sanitary Inspector): Major Charles S. Christie, River Point, R. I. (Attending Surgeon, Division Hadquarters).

Second Row—standing, from left to right: Lieut. Lawrence C. Meredith, Syracuse, N. Y. (Field Laboratory, San. Corps): Captain and Barthington, D. C. (Medical Supply Officer, San. Corps): Captain A. Platts, Chicago, Ill. (Division Dental Surgeon): October Surgeon): M. Bancroft, Colorado Springs, Colo. (Supervisor of Delousing and Bathing); Lieut. Lucius A. Fritze, Peoria, Ill. (C. O. Field Laboratory, San. Corps). (Courtesy Iowa Med. Jour.)

Continuing "The Medical Fortnightly and Laboratory News."

The Medical Herald

and Electro-Theravist

Incorporating the

Kansas City Medical Inder-Lancet

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Vol. XXXIX. JANUARY 15, 1920.



Notice to Our Subscribers

This issue of the Medical Herald is being mailed to all the subscribers to the Medical Fortnightly and Laboratory News which was merged with the Herald on January 1st, and they will continue to receive this magazine until the time for which they have paid has expired. who have paid up for both journals will be entitled to receive the Herald for two years from the date of payment. This rule will apply on all club subscriptions as well. Our readers will note that the subscription has not been advanced by reason of the consolidation, our ambition being to make the Herald the best one dollar medical journal in America! You can help us by remitting a dollar for 1920, and speaking a good word for us when you write to our advertising patrons.

Annual Banquet of the Buchanan County Medical Society

Nearly 100 members of this society dined at Hotel Robidoux, St. Joseph, on the evening of January 7th. Col. J E. Binnie, president of the Tackson County Medical Society, was the special guest of the evening, and he gave an interesting

talk on his experiences in the evacuation hospitals overseas. Col. Binnie was very free in his criticism of the "red tape" which hampered the medical department in its work. "There is one thing that we learned very thoroughly over there," he says, "and that is the value of teamwork." Dr. Binnie expressed his disapproval of the practice of erecting monumental hospitals. He is in favor of hospitals for the common people, adequate to their means, not so pretentious, but clean, well managed and efficient.

Dr. A. B. McGlothlan, the retiring president. in reviewing the work of the year, mentioned the clinics now being held at three hospitals as a most excellent feature, and hoped they would be continued.

Dr. L. J. Dandurant, the president-elect. spoke for a united profession and was earnest in his appeal for co-operation to make this year the best in the history of the society.

Dr. A. L. Gray, the poet laureate of the society, presented a lyric on the "Big Five," which he compared to the old time "Scalpel Six," and his hits at the various members of the local profession were very timely and amusing.

"After-dinner Speaking" a New Disease?

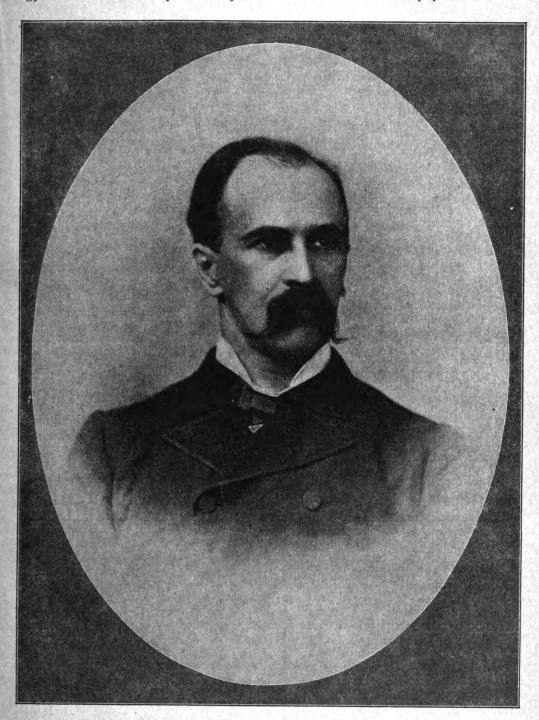
In the Atlantic Monthly for October, Burgess Johnson of the English Department of Vassar. writes entertainingly on this subject, and declares his modesty by expressing his doubt as to whether after-dinner speaking is a disease by using the interrogation point. But though he starts out gingerly as if he were treading on ground that was not his proper sphere, he soon enters bravely into the subject and affirms that all after-dinner speakers, who talk for a considerable length of time, who are oblivious to the impatience of their audience, as illustrated in shuffling of feet, yawns of unusual dimensions. and the shoving of plates aside, or the constant toying with knives, forks, and spoons, are practicing autohypnosis, or rather are the victims of it, on account of their being afflicted with hysteria.

This is a most important, as well as an alarming subject, and we would urge that a committee be appointed by the Buchanan County Medical Society to investigate, with a view to providing proper sanitarium care for those members in whom the disease has developed.

Doctor, if you receive a copy of the Medical Herald and are not a subscriber, please take it as a cordial invitation to remit a dollar and receive our magazine for the year 1920. Turn to advertising page 68 and note the feast of "Good Things To Come" in the early issues of the Medical Herald.

The Death of Dr. Osler

Another great medical man has gone. Richly endowed with brains and the possessor of limitless energy, he is another example of the power the ability to conserve his apparently inexhaustible supply of energy. Without a strong physical body no one is capable to rival the type of men of which Dr. Osler was a fine example. He was as near an ideal physician as we can ever



SIR WILLIAM OSLER-1849-1919.

of work, which is another name for genius. He

get. Not only was he intellectually great, tiredevoted his best work to the accomplishment of what was before him each day, and yet, he had above all, he was a good man. Eulogy is probably out of place in speaking of men of this type, and particularly in his case, he enjoyed the fruits of his labor and the gratitude and admiration of his fellow workers and the rest of the world that knew him. The medical profession is fond of him, and although he reached the biblical span of years alloted to man, we deeply regret his death. Dr. Osler's was a life of service. Exeunt omnes.

P. I. L.

American Congress on Internal Medicine

This organization, in conjunction with the American College of Physicians, meets at Chi-

cago February 23 to 26, 1920.

The sessions will comprise daily clinical and laboratory demonstrations in many of Chicago's leading hospitals and teaching institutions. There will be several evening gatherings. These will be addressed by men eminent in American medicine. One of the evening meetings will embrace the Fourth Annual Convocation of the American College of Physicians.

Ethical physicians of the United States and Canada who are interested in the advancement of what is best in clinical and scientific medicine and its affiliated sciences are cordially invited to attend all sessions of the American Congress on Internal Medicine. The gatherings will be of

great practical and scientific worth.

Hotel accommodations must be spoken for at once. Detailed information with regards head-quarters, hotels, clinics, scientific demonstrations, etc., may be secured by addressing Dr. Frank Smithies, Secretary-General, 1002 North Dearborn St., Chicago, Illinois.

Cardiorenal

Dr. G. M. Niles, Atlanta, Ga. (Journal A. M. A., Dec 27, 1919), says that all practitioners of medicine, particularly those specializing in gastroenterology, have patients with so-called "cardiorenal insufficiency," who complain of indigestion, distressing flatulence, epigastric fullness after eating and general digestive discomfort. The valvular lesions may be varied. There may be arrhythemia, myocardinal inefficiency or tumultous heart action. The urine may be loaded with albumin and show casts or it may be fairly normal. Without going into the question of actual cardiac and renal pathology in these cases, Niles rather discusses the methods employed for steadying the heart, aiding compensation, allowing physical space in the thoracic and abdominal region and lightening the work of the kidneys. As a cardiac "steadier" plus a diuretic, he has, perhaps, more faith in the infusion of digitalis than in any other preparation of the drug, and

combines with it a saline, varying according to the apparent needs, if the bowels tend to be loose. which is seldom the case. He gives prescriptions for relieving the gas in the stomach which emharrasses the heart action, consisting of spirits of anise, zinc phenolsulphonate and magma magnesia. In many of the uncompensated cases there is frequent dyspnea, for which he prescribes aromatic spirit of ammonia and elixir of ammonia valerianate, equal parts, 11/2 ounces, a teaspoonful of which can be given in water every fifteen minutes. Dietetic restrictions and regulations are most important, and Niles offers a suggestive diet list, in which sweets and fats are avoided. It does not promote a gain in weight, but a slight loss is not prejudicial. These practical suggestions, Niles says, may not be possible to enforce in all cases, and some patients may be rebellious even when they are followed, but he thinks they will be generally helpful.

Our Laws and Our Practice

The young man who contemplates medicine as a career must finish the high school, have two years at least in college, four years at a medical school and at least two years as an interne in a hospital. He may devote a year or two more in special work. When he arrives to practice his profession in one of the cities in the Missouri Valley his head is crowded with a knowledge of pathology and a dozen of other ologies, all up to date, he finds the public has been educated to a greater or larger extent by the numerous bidders for a practice, by a not inconsiderable herd of drugless healers whose offices are crowded with patients, real or imaginary sick.. The writer finds almost every week pamphlets and brochures entering into detail in regard to the eminent ability of this representative of the cult who claims to cure everything.

A so called state journal devoted to osteopathy, published at St. Joseph, Mo., "Super-Health," for instance, claims that the cures of influenza by their school of treatment, in the late epidemic, was 100 per cent. A lot of similar statements are found and explained to the gullible public. It says that the soldier can now get the benefit of osteopathic treatment, which, is inferred, was kept from him while in the army by the jealous allopath in control. Of course, the regular profession doesn't accept the title of path of any kind, as we are not limited by any pathy and we can practice, using treatment in any way indicated by our knowledge of the pathological condition present.

But here is the point. While writing there is before us the Chiropractic Health Herald, distributed apparently to every residence in the city. bidding for trade. It is full of explanation and

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every medical man knows about the credulity of the average person, particularly if they are to carry on an investigation of their own. The A. M. A. and the medical high brows could learn a valuable lesson, not much in medical education, but in getting practice from the public, if they wish to let the doctor make a living. A physician of a medical equipment much inferior to that stated in the beginning of this article, would at least represent rational medicine. Why should every practicing physician have such an elaborate education, while those he meets in daily competition do not? The drugless healer is an aggressive getter of business and all he wants is a fair field. He does not rely on dignity, but he tells the public directly what he can do. Then we have a disorganized medical profession. While we are teaching sanitation, hygiene and right living, the drugless healer takes advantage of the credulous and those who believe something should be done about treating their bodies, their real or imaginary ills, by the psychotherapy of the peculiar cult he represents. We make our living by treating sick people. All this should be food for reflection for our ultra medical high brows, who wish to put the regular doctor in as high an atmosphere as the H. C. L.

Opprobrium Medicorum.

St. Louis' Low Death Rate

The death rate in St. Louis for 1919 was the lowest since the records of the Health Department were started in 1867. The number of deaths compiled for the year was 10,249, which is at the rate of 12.5 per 1000 of population, the Health Department estimating the population of the city now to be 820,000. The lowest previous rate was 13.3 in 1915. The death rate in 1867 was 29.7, 6,538 in a population of 220,000 dying in that year. The number of births for the year 1919 was 13,570. This was 1,060 fewer than in 1918, when the total was 14,630.

New Use of X-Rays

X-rays have a new use, says the London Times. Instead of being used almost entirely for examination of the human body, they are now to be used in inspecting lumber and steel. One use may be a method of distinguishing between different metal alloys, since metals vary in their resistance to the rays. This use would be limited by depth, the rays penetrating only about four inches into ordinary steel, and less into special alloys. The most obvious use is the examination of metal castings to find defects such as blowholes.

Kansas City's Professional Men to Have New Building

Plans calling for the erection of a building for professional men exclusively have been indorsed by the Kansas City Dental society and the Jackson County Medical society. The building is to be 14 stories high and have 600 offices for physicians, dentists and other professional men. The location selected is the corner of Eleventh and Oak streets.

Honors for Dr. Franklin H. Martin

The title of Companion of the Order of St. Michael and St. George was conferred upon Dr. Franklin H. Martin by the Prince of Wales in the Belmont House, Washington, on Thursday, November 13, 1919, in the presence of the members of the cabinet, the diplomatic corps, etc.

"Moore" Power for Your Car—The Moore Auxiliary Transmission for the Ford car is the last word in efficiency. It makes your car the equal of any high-priced car on the road. Send for booklet and price. Address The Tractor-Train Co., 1439 Myrtle St., Los Angeles, Calif. Do it today. (See adv. in this issue.)

Typhus Exterminated in Serbia—The fiveyear campaign which American Red Cross doctors and nurses have been waging against typhus in Serbia has ended victoriously. The recent report of the Serbian Commission states that there are but sixty-five cases in the country, two-thirds of these being in Belgrade where the Red Cross operates a hospital for typhus cases only.

We call attention to an announcement in this issue by Dr. Frank Blackmarr, of Chicago, placing his facilities for radium treatment at the disposition of the physicians of the Missouri Valley. Dr. Blackmarr is an acknowledged expert in the line of electro-therapy, and x-ray, and we commend him to our readers who may be in need of his services.

Mr. W. T. Brennaun, formerly the Kansas City representative of Horlick's Malted Milk, called at the Herald office recently, en route to the factory at Racine, Wisconsin. Mr. B. is now the Pacific Coast "Horlick" man, with headquarters in Los Angeles. He is genuinely enthusiastic regarding California and its wonderful climate, and has found, he says, just one other theme upon which he can divide his enthusiasm with Horlick's malted milk.

Fluid extract of cota bark, three drops in a spoonful of water, three or four times a day, or after passage, is almost a specific for diarrhea of children.





CHARLES RYAN, M. D. President Medical Society of the Missouri Valley 1919-1920.

The subject of our sketch, Dr. John Charles Ryan, is a Kentuckian by birth, born in Parmleysville, Kentucky, December 31, 1872, where he spent his boyhood days. At the age of eight his family moved to Colfax, Iowa, where they lived on a farm for three years at which time his father, in partnership with his uncle, Dr. J R. Ryan, built the Ryan Hotel and Sanitarium in Colfax. His early education was obtained in Colfax High School, where he graduated in 1890. Immediately after entered the Capitol City Commercial College at Des Moines. In 1891 and 1892 attended the Des Moines Baptist College. From 1893 to 1895 attended Cornell College at Mt. Vernon, Iowa. Among his ancestors there were many well known physicians. His grandfather and four uncles are numbered in the medical profession. His brother, Dr. Granville N. Ryan, has been engaged in practicing medicine and surgery

in Des Moines since 1895. Although many years Dr. Charles affirmed that he would never enter the profession of medicine, he found he could not resist the "urge of noble ancestry," and fin-ally succumbed to the "inevitable," and in 1904 entered the medical department of Drake University, Des Moines, Iowa. The following year he entered the medical department of the University of Illinois, at Chicago, where he finished his work in 1908. Then followed an internship of two years at the Chicago Polyclinic and Henrotin Memorial Hospitals. In the spring of 1910, he became associated with his brother, Dr Granville N. Ryan, in Des Moines, to look after the surgical side of the work. During 1910, 1911, 1912 and 1913 Dr. Ryan was a member of the faculty of the medical department of Drake University of Des Moines; taught operative surgery and dog cadaver to the last four classes finishing from that institution. Dr. Ryan has been a member of the surgical staff of Iowa Lutheran Hospital since 1915, and is one of the instructors in their training schools. He is a member of the American Medical Association, Mississippi Valley Medical Association, Austin Flint and Polk County Medical Societies. Has been a member of the Medical Society of the Missouri Valley for many years. Dr. Ryan's genial disposition, added to his ability as a surgeon, has won many friends, both in and out of the profession, all of whom are gratified to see new honors thrust upon him in the Missouri Valley.-C. W. F.

Dr. Hugh Cabot, of Boston, has been appointed chief surgeon at the University of Michigan, Ann Arbor, and will begin his new duties early next year. Doctor Cabot went to England in 1916 with the Harvard Unit and commanded General Hospital No. 22, British Expeditionary Forces with the rank of lieutenant colonel, and was made Companion of the Order of St. Michael and St. George. He is at present clinical professor of genito-urinary diseases in Harvard University School of Medicine, chief surgeon of the surgical service at Massachusetts General Hospital and director of clinics of the state board of health.

Col. Walter Fry, formerly sanitary officer at Camp Funston and for the last six months health officer for Junction City and Geary County, has resigned to accept a similar position at Lincoln, Neb. He will be succeeded by Dr. C. H. Kinneman of Keokuk, Ia., who was a sanitary officer with the A. E. F. in France.

Dr. Oscar A. Bandel has returned from New York City where he took a course in the New York Post Graduate School, and has associated himself for practice with Dr. Jacob Geiger, 619 Francis St., St. Joseph.



I went to a well known M. D.
And said, "What's the matter with me?"
Says he, "'Tis your liver;
Quit driving your flivver,
And cut out both coffee and tea."

I went to another who said,
"The trouble is all in your head.
Come out of your trance
And you'll stand a good chance.
So go home and forget all your dread."
—H. W. C., Medical Pickwick.

The joy of living is a sign of sanity. It is certainly physiological. Try it.

The doctor is in charge of the most valuable property of the United States—its population.

The Presbyterian Hospital of New York has adopted an eight hour day for student nurses.

Doctors continue to raise fees and the patients are relapsing into the purchase of patent medicines.

Any suppurative focus, even an ordinary boil, can give rise to abscess about the kidney. No new discovery.

At the head of the list of causes of failure in the vaccine treatment of arthritis, rheumatism and neuritis (1) false diagnosis; (2) errors in bacteriology, etc.

Excepting the big specialists in the city, the Medical Record says "Everybody does everything, or tries to, because nobody can afford to lose any sort of case."

When death holds all the trump cards and you see the game is up, do not torment your patient by sitting at the bedside of the dying man injecting stimulants into him.

The paramount issue is venereal prophylaxis in civil life. Moral considerations are taken into account, for its prevention would signify the prevention of untold sickness and suffering.

Intercurrent fever may cure and arrest disease, and some drugs cause fever and produce therapeutic results. Toxins may do this. Biological products, tuberculus, along with sodium nucleinate. Injections of foreign protein and their benefit is traceable to the febrile movement set up.

A new estimate of the total cost of the war to the United States in man power is officially announced as 116,492 dead and 205,590 wounded,

a total of 332,182. These estimates include losses to army and marine units on all fronts to September 1, 1919. Those killed in action totaled 35,585, or 11 per cent of the entire list; died of wounds, 14,742; died of disease, 58,073; died of accident and other causes, 8,092.

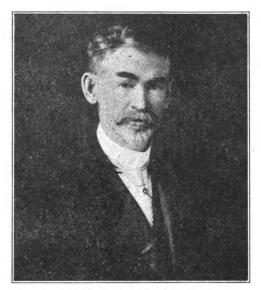
Speaking of the neglect of drug teaching at medical colleges, Dr. Dawes of New York says in the Medical Record: "Do you wonder that the general public, in its desire to have something done for its ills, crowds the waiting rooms of the osteopath, the chiropractor, and the X scientists, or turns to some of the so-called religious newspapers to read with interest the testimonials of ex-statesmen, ex-doctors, ex-public officials, and clerical incompetents as to the value of some patented article the very name of which shows its unscientific origin and composition?"

Yesterday I had about as severe a cold as possible, which had been coming on several days, and had been simply neglected, and I sneezed and coughed all day using any number of handkerchiefs. In the afternoon I took one or two doses of soda, half a teaspoonful, and in the evening took five more, at half hour intervals, in warm water. At midnight I took one of the grip powders I have so long prescribed, ten grains of phenacetin with twenty of soda, with hot water. and went to bed with two handkerchiefs under my pillow. I dropped to sleep very soon, and slept soundly until called at seven-thirty, when I took another of the phenacetin and soda powders and found the cold entirely gone; exactly the experience which I reported before and which I have had many times.—I.. D. Bulkley, New York Medical Record.

Another Link in the Merry Chain—Members of the Buchanan County Medical Society, and doctors living in the counties adjoining, will be pleased to know that the Merry Optical Company, of Kansas City, has opened a branch house at 716½ Felix Street, St. Joseph, Mo., where they will be pleased to receive calls or orders from their friends and patrons. The St. Joseph branch will be under the management of Mr. H. E. Weber who has been with the house for a number of years.

Prevention of Influenza—Fifty orphans in an institution escaped the wave of influenza which was active last October and isolation may be excluded as the cause of the immunity. The children all received a mixture of quinine, salicylate of soda and quinquina or powdered bark. The children also escaped two subsequent waves or local outbreaks and Camescasse is compelled to differ with those who have decided against prophylactic precautions.—Bulletin general de therapeutique.





DR. C. F. TAYLOR, 1856-1919 Editor "Medical World"

The death of Dr. C. F. Taylor, brief mention of which was made in the December Herald, removes from service one of the most conspicuous characters in medical journalism. Nor did Dr. Taylor confine his writings to medicine; he had a broad conception of international and sociological problems. His little magazine, "Equity," was widely read by men in charge of national affairs, and his clear-cut opinions permeated the high places. We believe we speak the truth when we say that Dr. Taylor kept in closer touch with his subscribers than any other medical editor of his day. Not only did he minister to their medical needs and conscientiously answer their questions pertaining to diagnosis and treatment, but he gave sound advice concerning investments, and was unrelenting in his attacks upon the "blue-sky" bond sellers who considered the medical men their prey. His devotion to his family and to his friends was most beautiful; his was undoubtedly one of the sweetest characters we have ever known. He is not dead; for his deeds still live; and will always live to glorify the name of Charles F. Taylor. No one could associate intimately with this gifted man without being the better for the companionship. The editor of "Clinical Medicine," to whom we are indebted for the portrait of Dr. Taylor, pays his memory the following tribute in a recent issue: "There has always been a close bond of sympathy between Doctor Taylor and us. The aims of The Medical World and of Clinical Medicine had at least one thing in common, and that was the desire to give the utmost practical assistance and sympathy to the man on the firing line. This feeling was intensified by the warm personal af-fection which we felt for Doctor Taylor and which we believe he entertained for us. We have felt it a great privilege to count him among our friends and we have enjoyed and profited by this friendship. During periods of great trial and anxiety, he was a warm-hearted, loyal, sympathetic, big-hearted man-a man whose great desire in life was, not, the accumulation of money. or power, or fame, but to be of service to his fellows and to the world, and this desire was expressed not only through his work in the World, but also through the little journal Equity, and his numerous and stimulating contributions to the great struggle for economic betterment." C. W. F.

Precaution Against Influenza—The medical department of Armour and Company has taken precautions among plant employes against a return of the "flu" epidemic in Chicago and other cities where the Armour plants are located. All employes have been notified that without charge they may have the influenza vaccine administered according to the formula of Dr. E. C. Rosenow. In addition to offering this vaccine free to employes, a general educational campaign along health lines and particularly with reference to the "flu" is being carried on among the workers in the plant. Dr. Volney S. Cheney, medical director of Armour and Company, reports that the employes are taking an interest in the campaign and that as a result no serious recurrence of influenza is looked for among Armour workers.

Dr. Bayne Decorated—Dr. J. Breckinridge Bayne of Washington, D. C., who saved southern Rumania from the scourge of typhus during the German occupation of 1917-1918, and who received the highest decoration from King Ferdinand, has again been honored by the Rumanian government. The king and queen have personally thanked him for his services and presented him with the order of the Regina Maria, First Class. The work of Dr. Bayne among the sick has made his name known in every household. He is regarded as a sort of national hero by the Rumanian peasants, among whom he has combated typhus for two years. He now has charge of three American Red Cross hospitals at Cajarcu, Titu and Voinesti, which handle typhus cases Thousands of cases have been treated here, yet the low mortality of three per cent has been maintained. Dr. Bayne's immunity from typhus has been a source of mystery to Balkan physicians, scores of whom have died from disease which they contracted from their patients.



The Laboratory News

AND CLINICAL REVIEW

(Consolidated with The Medical Fortnightly, October, 1914) (Merged with The Medical Herald January, 1920)

A Journal of Laboratory and Clinical Facts for the General Practitioner Edited by Thos. A. Hopkins, M. D., St. Louis, Mo.

INFLUENZA PNEUMONIA

Dr. Douglas Symmers, New York (Journal A. M. A.,) calls attention to the resemblance between the lesions in influenza pneumonia and those of the pneumonia of bubonic plague. He has had occasion during the present epidemic to investigate by necropsy twenty cases of death from influenza pneumonia, occurring in the Willard Parker and Bellevue Hospitals. The changes in the lungs, he says, are those of a variety of confluent lobular, exudative and hemorrhagic pneumonia in which the naked eye and microscopic features so closely resemble those of the lesion in a pneumonic variety of bubonic plague as to provide an interesting study in similarities. There are, however, several features differentiating the two diseases on anatomic grounds. If these should be inconspicuous or absent the pathologist might be in doubt, were it not for the aid of modern bacteriologic methods, as to whether or not he was facing a milder form of bubonic plague. To the criticism that the otherwise harmonious comparison is violated by the projection of superficial buboes into the picture of bubonic plague and their absence in influenza, it may be replied that the pneumonic variety of plagues is seldom accompanied by the bubonic manifestations from which it takes its name. As far, however, as the deeper nodes are concerned, the extent and distribution of thoracic and abdominal adenopathies in both diseases bear out the analogy The similarity of the two diseases is enforced by the clinical features, which are remarkably alike in many respects, and by the pathology of certain tissues other than the lungs. It is a satisfaction, however, that the bacteriology of the present epidemic has nowhere shown the bacillus pestis to be present as a causal factor. In the majority of the necropsies of pneumonic cases in the present epidemic, Symmer's experience is that the pleural cavities are free from excessive fluid accumulation. Only two exceptions were observed, and in one there had been a longstanding empyema preceding the influenza. In the second case both pleural cavities were half filled with serofibrinous exudate, extensively obscuring the pleural membrane. In still two other cases, the pleurae showed only a small patch of fibrinous exudation. In the other seventeen cases, the pleurae were smooth and devoid of exudate. It is important to note here that in this regard the pathology of bubonic plague is different, extensive pleural exudates having been found by MacCallum and Cole in every one of twentyfive necropsies in Manchuria. The naked eye appearances, however, are very suggestive and are thus grouped by Symmers: "1. Cases with (a) extensive confluent lobular solidification of the lower lobes; (b), circumscribed or partially confluent consolidation of the lobules of the upper lobe, and (c), areas of acute vesicular emphysema. These cases without exception represented examples of rapidly fatal pneumonia. 2. More prolonged cases characterized by complete or almost complete consolidation of all or most of the lobes of both lungs, areas of acute vesicular emphysema occurring as an inconspicuous feature. 3. Those cases in which the pneumonic process is obviously subsiding." The pathologic findings in acute cases are described, such as the involvement of the lower portion of both lungs, the bluish consolidation, and practically constant petechial hemorrhages. The characteristic microscopic findings, etc., show a marked resemblance to those in bubonic plague as described by Crowell. The almost complete consolidation of the lung was observed in several of the more prolonged cases. One opportunity was given to study a lung where the pneumonic process was apparently sub-siding. The patient had died suddenly after returning to work at an illadvised moment of convalescence. Microscopic examination of solidified patches in the lungs revealed intense congestion of the interalveolar capillaries with dense collections of leukocytes in the air vesicles and smaller bronchi. Symmers calls attention to one case where the lung changes were the same as those described by Delafield and more recently studied by MacCallum, as constituting an acute productive pneumonia. This is fairly common as a sequel of measles, and according to MacCallum and Cole, is caused by a hemolytic streptococcus. The circulatory symptoms were numerous, and are described somewhat in detail. They are important as indicating the need of stimulation as soon as the diagnosis is made, and are believed to be present at the earliest moment of in-The microscopic findings in the kidneys, brain, liver and duodenum and spleen are also described. The observation of Ball that pregnant women are liable to abort in influenza was confirmed by Symmers' experience. This subject is being investigated and will be reported on later.

THE NATURE OF RABIES AND THE ANTIRABIC TREATMENT

Sir David Semple concludes his articles on this subject (British Med. Jour., Sept. 20, 1919,) by a description of the various methods employed to immunize patients against rabies. He again emphasizes the importance of early treatment before the virus implanted in the wound by the animal which inflicted the bite has had time to reach the nerve centers, and the fact that if immunity has not been conferred by that time treatment is futile. He describes different methods of preparing antirabic vaccines with living virus either from the spinal cords. or from the brain, medulla, and spinal cords of rabbits which have died from rabies after inoculation with "fixed" rabies virus. In the "dried cord" method a living virus is not used until after the commencement of treatment by a dead or attenuated virus; but in the dilutation method, and in the method of drying the cords for a short time and preserving them in glycerin, a living virus is used from the outset. He

describes his method of producing antirabic serum by immunizing horses to a high degree with rabies virus by which he produced a serum which was highly rabicidal when mixed with living rabies virus. In a mixture of one part of serum to three parts of a strong virus emulsion the virus was destroyed in a few minutes at room temperature. He used this serum hypodermically as preliminary to the ordinary treatment in badly bitten and late cases, his object being to create a passive immunity pending the acquisition of an active and more lasting immunity as the result of treatment. This preliminary treatment was used in 202 cases, but owing to the fact that the serum was followed by ordinary treatment it was difficult to say whether any real benefit was derived from the serum. The writer also describes his method for the preparation of a 4 per cent dilution of dead virus in 0.5 per cent carbolic acid in physiological saline solution. This is a dilution suitable for treatment purposes, and can be still further diluted if necessary. This vaccine retains its immunizing properties unimpaired for three months at least, and probably for a much longer period, when kept in a moderately cool place, and not exposed to light. The vaccine can be prepared in any wellequipped bacteriological laboratory, and by any bacteriologist skilled in the technic of the preparation of bacterial vaccines. From such a laboratory it could be sent to various centers for treatment without running any risk of interfering with its efficiency, and where any medical man with a knowledge of the administration of bacterial vaccines could carry out the treatment of patients. A comparison of the results obtained by this carbolized antirabic vaccine with the results obtained by other methods of treatment shows a lower percentage of failures for the antirabic vaccine. Antirabic treatment is now being carried out in England with carbolized antirabic vaccine.-Med. Record.

EXPERIENCE WITH ARTIFICIAL PNEUMO-THORAX

At the Calydor Sanatorium, Gravenhurst, Ont., during a period of five years, 63 cases were treated by artificial pneumothorax. In every case the measure was attempted only after other methods of treatment had failed. In the ordinary course of events the prognosis before compression was fairlry good in 2 per cent, doubtful in 25 per cent, and bad in 73 per cent of the series. Only 6 per cent were clinically unilateral. Use of the x-ray was available only for little more than one year of the five. Parfitt and Crombie (American Review of Tuberculosis, September, 1919, vol. iii. No. 7) analyze the cases from many points of view, and discuss such matters as the incidence of pleural effusion, mishaps due to operation, precautions, movable mediastinum, confusing manometric readings, and the lack of necessity of the x-ray. They feel that the success of the procedure should not be depreciated by the inclusion in statistics of a large proportion of cases in which a useful degree of compression has been prevented by physical conditions, merely because an attempt at induction has been made. Since the object of treatment is, in a large proportion of cases, to afford symptomatic relief and to effect an arrest of disease, any criticism of results based upon statistical evidence regarding length of life and working ability only is unfair. They find, too, that the apparently durable results are five times as many for the moderately advanced as for the far advanced class Liability to pleural effusion in more than onethird of the moderately advanced cases, should not outweigh the advantages to be derived from the method. Induced pneumothorax is the most effective form of treatment at our disposal for the progressive case of any stage and for indolent, moderately advanced cases. Accidents are always imminent: consistent carefulness is all-important. The character of the mediastinum should be investigated in every case and pressures should be adapted to meet its peculiarities.

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HEMOLYTIC STREPTOCOCCI

In view of the interest in the causation of bronchopneumonia in the camps during the war, for which the hemolytic streptococci appear to be largely responsible, M. S. Tongs, St. Louis (Journal A. M. A., Oct. 4, 1919), has taken up this subject with special reference to their occurrence in the nose and throat after tonsillectomy. He first reviews the literature on the subject, and the observations of their occurrence in the nose and throat of healthy individuals. Then he describes his own researches. Cultures have been made from the nose and throat of 567 persons on blood agar plates. The technic of the study is detailed at a little length, but the results can be briefly stated. Of 100 cultures made from the throat, 67 showed the presence of hemolytic streptococci; in 100 nasal cultures only 5. Of the 100 individuals, 39 were schoolchildren, and 32 of these harbored hemolytic streptococci in their throats. Of 61 average individuals of this series, 35 were found to be carriers. The higher percentage in schoolchildren is credited to the large tonsils, which were seen in almost every one. In Tongs' experience, the shake method is more reliable than the surface streak in detecting these organisms. Seven throat cultures that seemed negative on the surface streak were found positive by the other method. One hundred and twenty-five pairs of excised tonsils were examined. Of these, 74 gave positive cultures from the tonsil surface, and 98 from the crypts. Three hundred and forty-two persons, medical students and dispensary patients, were examined to test the frequency of the organisms after tonsillectomy. Only 17 throat and 10 nasal cultures were positive. Of these, 6 gave both throat and nose cultures positive. In order to learn whether hemolytic streptococci may be present or absent regularly in throats with the tonsils removed, four previous carriers and eleven noncarriers among the tonsillectomy cases were selected for subsequent examination, repeated three times. None of the noncarriers showed the germs, but all four of the previous carriers gave positive tests, one at all three examinations, one at two, and one at only one. The cultural characteristics of the growths are described, and the conclusion of the article is given as follows: "The tonsils, especially when hyperplastic, are a breeding place for hemolytic streptococci, and complete tonsillectomy appears to be followed in most cases by the absence of hemolytic streptococci from the throat."



ARSPHENAMIN REACTIONS

W. H. Guy, Pittsburgh (Journal A. M. A., Sept. 20, 1919), reports on the reactions in a series of 25,000 arsphenamin injections, and discusses their possible causes. Reactions necessarily originate from toxicity of the drug, technical errors or idiosyncrasy. The idea of correct technic vary, but most clinicians re-

port fewer reactions from the use of dilute solutions, and we are warned from the Surgeon-General's Office that a dose which is well borne by animals when slowly injected is fatal if injected in one minute if in concentrated solution. Water impurities have been charged with causing reactions, and Danysz recommends small initial injections to vaccinate against a more severe one. We must consider, however, the possibility of producing a more resistant strain of spirochetes. Chemically pure sodium hydroxid is essential, as chemical impurities have been demonstrated to produce reaction. Incomplete neutralization of arsphenamin has probably accounted for more avoidable reactions than any other one factor. The rules laid down by manufacturers as regards their particular brand should be observed. The temperature of the water is important, and the solution should be always filtered. Schamberg and his associates state that acid solutions of arsphenamin are from 50 to 60 per cent more toxic than the alkaline. Variations in toxicity in spite of the ruling of the Public Health Service are still possible. The two American products used in the present series of cases are claimed by their makers to be tolerated in much larger doses than prescribed in the official tests. Of the 25,000 injections, about 15,000 were of the arsenobenzol brand, and about 10,000 were of the salvarsan brand. The former made the better record. But with the best of technic and a comparatively nontoxic drug, reactions will be encountered that have their origin in the patient himself. The status of the syphilitic infection has something to do with the incidence of reactions. It seems reasonable that some reactions are due, at least in part, to the destruction of the enormous numbers of spirochetes, liberating the protein of their bodies into the blood stream with the production of an anaphylactic type reaction. It has been the author's experience, moreover, that patients with a demonstrable pathology of any kind do not tolerate arsphenamin very well. He describes the technic in detail, and gives his experience as regards reactions. From random questioning he is convinced that at least one in four patients fails to obey instructions fully, and yet has no reaction. Cold solutions accounted for three successive reactions, and on one occasion, the still being out of order, tap-water was used, and five out of forty men gave moderate reaction. The mineral content of the water at Camp Travis is suggested as a possible cause. In another case the water used first was from a new still and a lot of reactions were produced, and possible bacterial or chemical contamination is the only suggested possible cause. A group of about forty cases developed reactions that could be shown to be due to nonsyphilitic complications. Contrary to expectation, no reactions occurred in live proved tuberculosis cases. Some of the reactions attributed to drug idiosyncrasy are really, Guy thinks, due to some unsuspected pathologic conditions. In only two cases were they forced to a positive conclusion that idiosyncrasy existed. Only a few Herxheimer reactions were seen. There were two fatal reactions out of approximately 3,000 patients, and these point to the necessity of careful routine urinary examination. On the whole, Guy concludes, while some may disagree with him in his statements, the results of his study tend to strengthen the growing conclusion that the arsphenamin in the market is a comparatively safe product.

THE KIDNEY IN INFLUENZA

In a recent work Dr. R. Dalimier (Paris Le Monde Medical) discusses the influence of influenza on the kidney. This is a subject which, on account of its

prime importance, deserves to be classed as one of the most useful subjects on investigation during the recent epidemic.

The constitutional influenzal infection often attacks the kidney. The renal forms of influenza, previously overlooked, are possessed of such importance that by taking them as bases we can divide patients into two well-marked categories viz: those whose kidneys remain healthy and who merely follow the usual course of the pleuro-pulmonary complications which they develop, and those whose kidneys are involved, in which the clinical picture, the prognosis and the treatment are altogether different. In its mildest degree the renal trouble shows itself in the form of prenounced albuminuria, in its gravest form by uremigenous acute nephritis of which I have seen several instances during the last six months. Between these two extremes renal insufficiency may assume intermediate forms, more particularly the asphyxial form consequent upon hyperacute oedema of the lungs which appears to be due to this cause and is equivalent to pure respiratory uraemia.

The participation of the kidney easily escapes recognition because it supervenes in the course of other grave visceral complications of influenza. It requires to be looked for with care and this search is the more necessary seeing that the farther course of the disease is thereby wholly transformed. The prognosis in a case of influenza is greatly aggravated by the existence of renal lesions. The greater number of patients who succumb are among those who had presented copious albuminuria and the cases in which death has occurred within a few hours (acute oedema of the lung) or in a few days (acute uraemia) are the consequence of renal insufficiency. Investigation of the state of the renal function therefore is of major importance in the course of an attack of influenza and the following indications should be borne in mind in daily practice: (1) A daily examination of the urine; (2) in presence of massive albuminuria look upon the case as being primarily renal and only secondarily influenzal. Apply forthwith the treatment of renal insufficiency without waiting for the supervention of graver symptoms; (3) should uraemia supervene apply the proper treatment without a moment's delay.

TREATMENT OF ACUTE EPIDIDYMITIS WITH NORMAL HORSE SERUM

Dr. R. A. Brown (Glasgow Medical Journal) had previously employed antidiphtheritic serum in the treatment of gonorrheal epididymitis with good results and as a basis of comparison treated a series of cases with normal horse serum. The results of 100 selected cases of gonorrheal epididymitis (acute) are comparable with those obtained by employing antidiphtheritic serum, in this respect, that 200 to 250 c.c. of normal horse serum are required to produce the therapeutic effects obtained by 25 to 30 c.c. of diphtheria antitoxin. Taking the results as a whole, normal horse serum in the amounts indicated gave results as good as the antitoxin. An important point which emerged in the comparison of the two series was, that while diphtheria antitoxin in the small amount produced an obvious constitutional reaction (fever and sweating) there was no such constitutional reaction following the use of large amounts of normal horse serum. A review of the two series of cases has left the following impression: (1) That the normal horse serum does not produce in the same degree the "shock" reaction produced by diphtheria antitoxin. (2) That the diphtheria antitoxin with the more severe shock has a more rapidly ameliorating effect on the symptoms of the disease, that is to say, on the pain and discomfort, than the normal horse serum.

The conclusions arrived at throw but little light on the mode of action of the two sera, although the fact that a greater amount of normal horse serum is necessary to produce the same result is a fact of considerable importance.

There arises, also, the question of these phenomena (differences in the properties of the blood in the cases treated by the two sera respectively) to the reactions which have been designated "protein shock therapy." The conclusion reached from empirical experiments is that non-specific proteins give rise to more or less acute "shock," producing metabolic disturbances more particularly in the blood and blood producing organs, so that leucocytosis is produced and fluctuations in the ferment and antiferment balance arise

Although the author's observations leave untouched the problem why it is that there should be such a great difference in the relative amounts of the two sera required in the effective treatment of epididymitis, the general conclusion may be suggested that the injection of either serum produces a "serum disease," which in turn exercises an immunizing influence on the course of the gonococcal infection. Whether this influence is peculiar to gonococcal invasion of the epididymis is a problem awaiting solution.

INFECTIONS OF KIDNEY

W. J. Mayo, Rochester, Minn. (Journal A. M. A., Oct. 4, 1919), takes up the subject of kidney disease in general with special reference to hematogenous bacterial infection. He first notices the types of nephritis described by Bright, the wet type, or large white kidney, and the dry type, without edema and usually with small contracted kidney. The first is due to some general infection and is usually acute, while the second may have latent symptoms for a long period, and if edema occurs it is the result of cardiac failure and not of salt retention. Confusion, however, exists from mixed types. There is a type of the acute nephritis caused by the chronic infections of the teeth, tonsils and gall-bladder and duodenal ulcer. etc., which can be cured by removal of the cause. Chronic Bright's disease of the type 2 acts as a cause for lowered kidney resistance and a secondary true nephritis of the type 1 may be superadded, especially as a terminal infection. The function of the kidney has come to the fore in the last decade, as especially noted by Rowntree. The percentage of urea in the blood or the phenolsulphonephthalein test will frequently give a clue to the state of the kidneys not obtainable by the urine tests. The kidney in health filters bacteria out of the blood without injury to itself, but it is the retention of the bacteria in the kidney that causes trouble. We know much less about its ability to filter out toxic materials. In the greater number of cases of nephritis no bacteria are found, and we must believe some material causes the trouble, though it may be an ultramicroscopic germ. Mayo describes the embryology of the kidney. The filtering portion of the kidney arises from the meso-The common, solid tumors of the kidney commonly miscalled hypernephroma are true mesotheliomas, that is, malignant neoplasms arising in the kidney filter. The kidney is a filter rather than a secreting organ. Nephritis, the result of living organisms, may be called type 3, says Mayo, who believes such infections to be in most cases hematogenous. The effect of such infections on the kidney depends on the nature of the germ. Pyogenic infection may lead to cortical abscesses, but scanty urinary findings. The pyogenic cocci are short lived and are often not to be found in the pathologic conditions they cause. On the contrary, colon bacteria may give abundant evidence of infection without causing abscesses. When the cause of nephritis is living bacteria the lesion may be unilateral. It is often due to cocci found in the skin, focal lesions, abscesses, etc. Acute streptococcal infections are most malignant, and both subacute and chronic are due commonly to septic endocarditis. In the fulminating type of hematogenous pyogenic infections, unless a nephrectomy is performed, death may result within a few days. The acute condition is often confused with intraperitoneal infections, especially on the right side. Types 1 and 2 are of surgical interest only because of complications, but type 3 is of great surgical interest, and is the most encouraging form of nephritis when thus treated. Mayo comments on the contributions of the surgeon to these problems, he sees the conditions in life independent of the clinical picture or the necropsy findings. Mayo refers to some of his own experience as revealing the pathology. Decapsulation has been valuable in his experience in the small group of cases in which there are scars and lime deposits in the capsule of the kidney and in another group still more rare, that of acute nephritis, where urinary function has ceased and patients are apparently moribund and operation has revived the function. For movable kidney, etc., he has seen no good effect from nephrorrhaphy other than the psychic.

TESTICULAR GRAFTS AND SURGICAL OPO-THERAPY

The Archives Medicales Belges of July 7, 1919, lxxii, 7, contains the first professional account we have seen of the sensational experiments in testicular grafting by Voronoff, which received such wide newspaper publicity. The article is a joint review by Voncken, which opens with an account of experiments made by Lydston years ago. The American surgeon receives full credit for priority in this field, but close behind him came the Dutchman Steinach. who, in June, 1918, reported the cure of a homosexual by implantation of a testicle. In this case the subject does not seem to have been a true invert but rather a pseudohermaphrodite with sex confusion. homosexual component was due to the gonads, for the apparent testicle proved to be more of an ovary than a male gonad, and the grafted testicle caused the disappearance of both the homosexuality and hermaphroditism. Rohleder, as early as 1917, had suggested the grafting of testicle as a cure for true inversion, but it does not appear that any cases were Voronoff did his work in the laboratory reported. of the College de France and reported his results before the last session of the French Congress of Surgery. But the only experiments mentioned by Voncken were on animals—old he-goats and rams. Nothing is said of old men or champanzees. It is, of course, possible that Voronoff has published other work at a later date, but the only experiments made on man which receive mention in the article are those of Lydston and Steinbach with an account of a case by Leichtenstern during the war in which a cryptorchid testicle was implanted in the scrotum of a soldier who had been castrated by a wound. The result was excellent.-N. Y. Med. Record.

Saving the Doctor's Face—A Hopkins doctor is of the opinion that fully one-fourth of the women who come to him for medicine need only to work, but we are not going to say which one of our doctors it is.— Hopkins Journal.

DROPSY

Indications:

Dropsy of any origin.

Bright's Disease,

Valvular

Diseases.

Heart Trouble following Influ-

enza, Cirrhosis, Anasarca. This is an advertisement of our sole product, into which we put all our efforts to produce as nearly a perfect remedy as possible, for just two of the many ailments of humanity which you are called upon to treat.

DROPSY AND HEART DISEASE

ANEDEMIN doesn't always relieve even these, but it will give you a better result in a greater number of cases than any other remedy, and do it without danger to your patient and with no bad after-effects. It has no cumulative action and produces no stomach disturbance; is a powerful diuretic without irritating.

Sample, literature with formula to physicians.

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Poems the Doctor Should Know

HE DID NOT KNOW

He did not know that he was dead; He walked along the crowded street, Smiled, tipped his hat, nodded his head To his friends he chanced to meet.

And yet they passed him quietly by With an unknowing, level stare; They met him with an abstract eye As if he were the air.

"Some sorry thing has come to pass,"
The dead man thought; he hurried home,
And found his wife before her glass,
Dallying with a comb.

He found his wife all dressed in black; He kissed her mouth, he stroked her head. "Men act so strange since I've come back From over there," he said.

She spoke no word; she only smiled, But now he heard her say his name, And saw her study, grief-beguiled, His picture in a frame.

Then he remembered that black night
And the great shell burst, wide and red,
The sudden plunging into light;
And he knew that he was dead.
—Harry Kemp in the Century Magazine.

WHAT WINS

It's the everlasting climbing that gets you to the top. And the everlasting sticking to the task you'd like to drop;

It's the grit and vim and muscle

In the rough and tumble tussle

That will bring you home to victory and the distant goal you seek;

It's the ever up and working,

Never lying down and shirking

That eventually will land you on the mountain's sunny peak.

It's the patient perseverance to the plan which you have made

That will bring you through the dangers and the pitfalls which are laid;

It's the steady, constant driving

To the goal for which you're striving,

Not the speed with which you travel, that will make your vistory sure,

It's the everlasting gaining,

Without whimpering or complaining

At the burdens you are bearing or the woes you must endure.

It's the holding to a purpose, and the never giving in, It's in cutting down the distance by the little that you win;

It's the sure and firm endeavor,

Not the brilliant stroke and clever.

That shall bring you home to gladness and to days of joy and song,

It's the iron will to do it,

And the steady sticking to it,

So whate'er your task, go to it! Keep your grit and plug along! —Edgar A. Guest.

Two Interesting Letters

The Dionol Company.

—, Ill., Sept. 30th, 1919.

If you are so cock sure about the potency of Dionol Treatment, I suggest that you may send me 1½ dozen Dionol preparations assorted, but let me tell you that the price will not be sent to you until I have tried it to my entire satisfaction.

(Signed) — M. D.

HOW DIONOL MADE GOOD

The Dionol Company.

---, Ill., Nov. 18th, 1919.

I have used both Dionol preparations you sent me in varieties of cases with excellent results, and I consider that Dionol is all that you claim and more. It is remarkable in reducing pain, fever and inflammation in a hurry. I am entirely satisfied with its use and results, and I will not be without it in the future.

I am enclosing herewith a money order for \$10.90 for the last consignment of Dionol with the request to please send one dozen more of Emulsified and half a dozen Ointment Dionol, through —————Druggist, and oblige.

(Signed) ———M. D.

DIONOL is the "something different" that secures results, unobtainable by usual methods.

DIONOL is effective in subduing local inflammation whether the latter exists locally or as a part of some general disease.

The acid test of Promise is Performance. **TRY DIONOL.** Send for literature, Case Reports, etc.

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Notes on Reliable Remedies

"I have been prescribing Tongaline for many years and find it the most reliable agent there is for the diseases for which it is intended. Some physicians do not give sufficiently large doses at the start. In severe cases particularly, Tongaline should be pushed until the full physiological effects are felt and the system becomes well saturated. This will invariably arrest the ailment by actively stimulating the organs of elimination and then a continuance of smaller doses will induce an early recovery."

Campho-Phenique Powder is an almost perfect germicide. It prevents in nearly every instance the possibility of the formation of the toxic products of germ life, and absorbs any excess of secretion, thus meeting the indications of an ideal antiseptic dry dressing. It is adapted for use in all cases in which iodoform and other dry dressings are indicated, and generally gives superior resuluts. It is pre-eminently antiseptic in character, efficient as a germicide, and finally, its anaesthetic effect greatly enhances its value as a dressing.

A Silver Germicide in Convenient Form—Silvol Capsules, a convenient form of Silvol, enables a physician to prepare a fresh solution of Silvol in a few minutes. The contents of one capsule, when dissolved in two fluidrachms of water, make 5 per cent solution of Silvol. The contents of four capsules, when added to two fluid drachms of water, make a 20% solution of Silvol. Silvol is a non-irritating silver germi-

cide. It is indicated in the treatment of acute inflammations of the mucous membrane of the eye, ear. nose, throat, urethra, and vagina. It is employed in solutions ranging from 5 to 50 per cent.

The Advantages of Pasadyne as a Sedative—The chief advantages of Pasadyne (Daniel) lie in its marked sedative powers and freedom from disagreeable effects, and obviation of the possibility of habitormation. With most sedatives of power the aftereffect is objectionable in that they may cause depression and establish a habit with the patient. Pasadyne (Daniel) is a concentrated tincture of passiflora incarnata and possesses definite and potent sedative powers, being adapted particularly for use with women or elderly persons who especially must be protected from depressnig after-effects or the possibility of habit-formation. As a sedative Pasadyne (Daniel) is of the utmost value, and if you want one that is reliable and safe, use it. A sample bottle may be had by addressing the laboratory of John B. Daniel. Inc., Atlanta, Georgia.

To Put a Brake on the Heart-A proper understanding of the nervous action which governs cardiac systole and diastole will at once suggest the possibility or employing, for therapeutic purpose, certain agents which act more or less directly upon the heart and put a brake upon it. In exophthalmic goitre, as well as in cardiac neuroses and in tachycardia from any cause, it is possible to inhibit the cardiac fibres of the pneumogastric nerve and at the same time to stimulate the cardiac motor ganglia. By this means. the contraction of the heart is increased, its force augmented, while diastole is prolonged. This results in the regulation of cardiac rythm and a control which so manifests itself in a marked improvement, not only in the heart's action, but as regards the symptoms present in such a case. Such physiological action and

The Management of an Infant's Diet

In extreme emaciation, which is a characteristic symptom of conditions commonly known as

Malnutrition, Marasmus or Atrophy

it is difficult to give fat in sufficient amounts to satisfy the nutritive needs; therefore, it is necessary to meet this emergency by substituting some other energy-giving food element. Carbohydrates in the form of maltose and dextrins in the proportion that is found in

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are especially adapted to the requirements, for such carbohydrates are readily assimilated and at once furnish heat and energy so greatly needed by these poorly nourished infants.

The method of preparing the diet and suggestions for meeting individual conditions sent to physicians upon request.

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BOSTON, MASS.

..ect can be brought about by the employment of wo of the active principles of Squill, which, by the way, do not possess the irritating and nauseating action of other active principles of the drug. In Anasarcin Tablets, the physician will find a therabeutic agent of great value, in the treatment of the conditions mentioned above and also for the relief of the condition known as ascites, anasarca or dropsy. Anasarcin Tablets are safe to use, satisfactory in esults, A sample and literature regarding the prepaation, will be sent to any physician on request to the Anasarcin Chemical Co., Winchester, Tenn.

Pharmaceutical House Makes Interesting Announcement-In view of the nation-wide movement gainst intoxicants and the trend of the times as egards alcohol in its various forms, it is refreshng to note the stand taken by one of the large pharnaceutical laboratories-Eli Lilly & Company of Indianapolis. An announcement has just been made by this concern that its price list has been undergoing a revision and that alcoholic medicinal preparations that showed an increase in sale due to their use for beverage purposes, have been deleted from the list. Eli Lilly & Company recognizes the fact that there is a legitimate demand for many of the products containing alcohol; it also recognizes that under existing laws some of these products constitute a temptation to the unscrupulous. Rather than consent to an abuse of its products this manufacturer stands ready to discontinue their manufacture and sale. The support of the medical profession is solicited, on the basis if high quality and a unique selling policy. It is needess to say that the medical profession will undoubtedly look upon this step by Eli Lilly & Company as an admirable act in keeping with the attitude that has characterized a concern that has the reputation of being one of the most ethical pharmaceutical and piological houses in this country. It is to be hoped

that many other pharmaceutical houses will follow in the lead of this Indianapolis manufacturer and thus assist in elevating pharmacy to the highest possible plane of service to the medical profession.

The Pneumonic Lung-In an age when the written word runs into millions every year, fearless, indeed, is the writer who dares to produce "mere words." To hold a reading audience, facts and facts only are an essential and the portrayer of facts is the popular author of the day. The physician, in his ever constant search for additional knowledge, is entitled to the best there is, and with this end in view a brochure, "The Pneumonic Lung," has been published in the belief that therein the discriminating physician will find some facts which will aid him in the pursuit of his professional duties. The text matter of this booklet is the result of long and exhaustive study of the literature on pneumonia in its different phases, and in its preparation the works of practically every standard author who has discussed internal medicine have been consulted. The clinical records of hospitals have been a source of information and confirmation; the most recent discussions on pneumonia in American, British and French medical journals have been perused, and no field which would yield information has been left untilled. The illustrations have been painted especially for the accompanying text. The subject has been given the closest attention and study, and no opportunity has been neglected to attain the close pathological and anatomical touch so essential in bringing out the necessary details, thus adding to their practical value. Expense has been no factor in the production of this brochure. With the object of presenting to physicians a booklet which would refresh their knowledge of the etiology, pathology, symptomatology and treatment of a most destructive disease and in order that they might constantly have at their elbows an autuhoritative and most practical exposition of the subject, the authors have gone deeply into the matter. Physicians may obtain, without expense to them, a copy of this interesting booklet by addressing The Denver Chemical Mfg. Co., 20-34 Grand St., New York City, N. Y.

Owing to the temporary closing of Hotel Colfax during the Winter of 1917, because of the fuel famine and other war conditions, an impression has been created that the hotel does not operate during the Winter Season. This is erroneous. The hotel is now open and will be operated as in pre-war times "ALL YEAR ROUND." The hotel is operated upon the European Plan. Cafe service is "a la carte," or "table d'hote," as one may wish, thus affording the guests the opportunity of eating as they may desire. One may eat sumptuously or diet. Our cafe charges for either service are moderate and have proved very popular during the past season. Room rates are reasonable. One can have a comfortable steam-heated room, with hot and cold running water and telephone service, as low as \$1.50 per day, or have rooms with private bath, or "en suite" at slightly higher prices. The hotel, as cut above will show, is located upon a high hill, overlooking a beautiful scenic valley. The delightful site, with pure country air, lends enchantment which makes the "Colfax" one of America's most charming resorts for rest and relaxation, so much needed by the busy man or woman of today. The wonderful mineral water, the steam, vapor and massage baths, aid in the rebuilding of one's system, and are unequaled in this country or abroad. a week's vacation and rest this fall and visit "IOWA'S FAMOUS MINERAL WATER AND BATH RESORT." Booklets and analysis upon request. James P. Donahue, Proprietor, Colfax, Iowa.

"Pneumonia Prevention and Treatment" is the title of a very concise brochure issued by the Mulford Laboratories. It deals particularly with the production

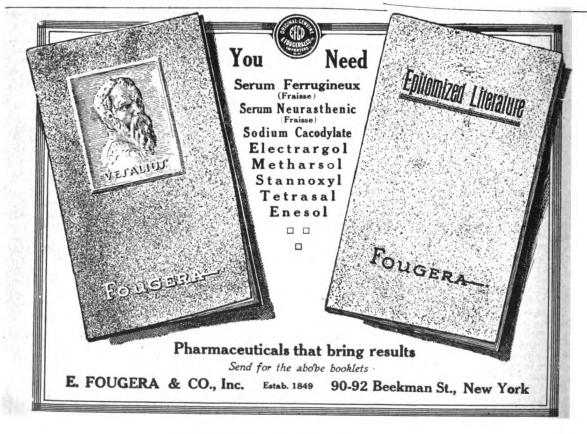
and testing of Antipneumococcic Serum, Pneumo-Strep-Serum and Pneumonia Serobacterin Mixed. Special attention is given to analysis and illustration of the apparatus for intravenous injection, which simplifies the administration to such an extent that an intravenous injection may be safely given without any previous experience. A postal card will obtain this very valuable addition to pneumonia literature, which ought to be on the desk of every physician.

Doctor, if you receive a copy of the Medical Herald and are not a subscriber, please take it as a cordial invitation to remit a dollar and receive our magazine for the year 1920. Turn to advertising page 68 and note the feast of "Good Things To Come" in the early issues of the Medical Herald.

An Effective Intravenous Solution—Guaisodide is a solution of guaicol and sodium iodide for intravenous use. It is ready for instant use and does not require any mixing or preparation of any kind; indicated in pneumonia, influenza, la grippe, tuberculosis and bronchial infections. Price, \$6.00 per box of six 20-mil, ampoules. Write for latest price lists of intravenous products to George A. Breon & Co., Kansas City, Mo.

INFLUENZA

What he considers as a unique case of epilepsy or epileptiform convulsions following a severe attack of influenza in a child, 2 years old, is reported by L. P. Clark, New York (Journal A. M. A., Dec. 6, 1919). Both grand mal and petit mal attacks occurred almost daily for two weeks. The occurrence of dentition seemed to render the convulsions more severe, and mental development was retarded, temporarily. At present the attacks are less frequent and of the petit mal type, and the child is improving under hygienic, dietetic and moral treatment.



ACID FREE CREOSOTE

Creotina

A neutralized acid-free preparation of U. S. P. Creosote and Sodium Hypophosphite, non-irritating to the stomach and ideal whenever Creosote is indicated.

It is our purpose to obtain for our new preparation, "Creotina," the serious attention of physicians, in order that we may emphasize its use in combating influenza, pneumonia and post influenza conditions—tuberculosis, the bronchial cough, colds, etc., and as a general reconstructive. It has given highly satisfactory results in all cases where Creosote has been indicated, no stomach irritation whatever appearing. It is free from the acids in Creosote, but retains the medicinal properties. Creotina is compatible in milk, cocoa or as a vehicle for any other drug desired. It overcomes every difficulty arising in the administration of this drug.



Formula:

U. S. P. Creosote, Neutralized,	not over3%
Sodium Hypophosphite	
Oil of Gaultheria	2/10 of 1%
Alcohol	

Simple Syrup and Water Q. S.
A 10-OZ. SAMPLE SENT FREE to INTERESTED PHYSICIANS UPON REQUEST.

CREOTINA CHEMICAL CO., 512 Granite Building St. Louis, Mo.

WOUNDED MEN MAKING GOOD

Disabled soldiers in the University of Missouri ho are being educated at the expense of the Federal overnment are making good, according to Septemer class reports just issued. Thirty-four men are nrolled in the College of Agriculture, six are in the chool Journalism, nine in the College of Arts and cience, and four in the School of Law. Many of the ormer service men are completing their college eduation, according to those in charge of the federal ork. Most of the men in the College of Agriculture are had no college training, but are fitted for farming because of their previous occupations.

QUESTIONNAIRE

That is the world to thee and me, my own?
ust our love's childhood, very soon outgrown.
That are these present, passing hours, dear heart?
Inly chance friends from whom we soon must part.
Ind what is Death, beloved, to thee and me?
It one dark day of Life's eternity.
Ind what is Love when all time's ways are trod?
In, Love is all of Life and all of God.

-Joseph Upper in Contemporary Verse.

Local Nerve Specialists assert that Kansas City eople must slow up in their pace or suffer a breakown. The warning is well meant, but any suggestion lat Kansas City should moderate its gait in the belining of this new busines year is absurd, of course. -K. C. Journal.

"What is the meaning of false doctrine, Willie?" sked the Sunday school teacher. "It's when the octor gives the wrong stuff to a sick man," replied illie.—London Tit-Bits.

DOCTOR

Just try GOITRE SPECIAL TAB-LETS on one patient and be convinced of the permanent benefits received.

Time required for treatment varies with different patients.

Gaitre Special Tablets

have been thoroughly tested by the Profession and sold to Physicians only for the past six years on their merits.

Certainly your patient should have the advantage of this treatment.

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Fully equipped to give individual attention to your prescriptions and surgical instrument orders.

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Golden Opportunities BARGAINS FOR YOU

New Sex Book—A practical, common sense, plainspoken little book on the sexual functions, by Mary Ware Dennett. Price, 25c, postpaid. Address Book Department, Medical Herald, Kansas City, Mo.

Bathing Girls—Just out. Pretty, modest and fascinating pictures for the doctor's sanctum. Fifty cents each; five pictures, all different poses, for \$2.00. Address Art Department The Medical Herald, Kansas City, Mo.

Wanted. Location.—A practicing physician wants to locate in Missouri. Small railroad town preferred. Would purchase a few acres of improved land. Address, F. C. E. care of the Medical Herald, Ridge Building, Kansas City, Mo.

Bargains in Electrical Appartus—Victor No. 1, complete D. C. with stand, \$100. One Kelly Koett, 8 K. W. Transformer. American Tube Stand and Coolidge Equipment like new, big sacrifice. Terms if desired. Address "Electric," Medical Herald, Kansas City, Mo.

Location for Doctor — The Commercial Club of Forestburg, So. Dak., announces a good location for young doctor, who will practice and operate a drug store in connection. A live little town and good territory surrounding. Address, Secretary Commercial Club, Forestburg, So. Dak., for full information.

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Vol. XXXIX.

FEBRUARY 15, 1920

No. 2



RELATIONSHIP OF INFECTION TO THE PRODUCTION OF SO-CALLED "PERNICIOUS ANEMIA" AND ITS SIGNIFICANCE WITH REGARD TO TREATMENT OF SUCH ANEMIA*

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Before attempt is made to suggest treatment for an ailment, it would appear quite essential first, that the nature of the affection under consideration be understood, and second, that any mode of treatment advanced be directed toward the remedy of known malfunctions and the local or systemic damage consequent upon such. Types of therapy departing from these basic principles are largely empiric and usually ephemeral.

Since Combes' original though imperfect, description of so-called pernicious or severe anemia in 1822 down to the present time, the nature of the disease has been obscure. Nevertheless, numerous systems of treatment have been advanced and have obtained a vogue. The chief virtue of many of these therapeutic regimes has been that the majority of them were harmless to the patient—in many instances the disease progressed in a sort of self-limited fashion to a fatal termination.

The unsatisfactory status of the treatment of so-called "pernicious" anemia may be ascribed chiefly to the facts that there has been great confusion in the medical mind as to what group of cases is to be made up of "pernicious" anemias and what type of case is to be excluded from the classification. Very likely the term "pernicious"

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taken in the sense of "fatal" is largely responsible for some of the existing confusion.

The adoption of this nomenclature has resulted in the more or less general conception that any anemia presenting the feature of chronicity, intermittance and of obscure origin should be classed as "pernicious." Moreover, if in a given case morphologic study of the blood picture revealed the megaloblastic features emphasized by Ehrlich, it was presumed that the disease should be included in the "pernicious" group. A second and perhaps more important cause for confusion arose as a consequence of the carelessly grouped but widely circulated classification of the anemias by Biermer in 1871. Although in 1855, following a masterly study of a peculiar anemia, Addison had clearly defined an unusual syndrome, Biermer, either through lack of knowledge of Addison's contribution, or as a result of his failing to appreciate the essential features of Addison's anemia, suggested the term "progressive pernicious anemia" to cover various forms of anemia both idiopathic and symptomatic in virtue of their having common clinical features. Although Biermer's classification was strenuously disputed by Eichhorst and Immermann, it secured wide-spread recognition and, in fact, furnished the bases for Ehrlich's later morphologic classification of the severe anemias.

Before attempting to emphasize any mode of treatment of Addisonian anemia, it is quite necessary that the conception of the ailment as described by Addison should be appreciated. It is frequently stated that any severe anemia, provided it is not acutely fatal, may result in the clinical and morphologic variations from the normal described by Addison; that is, that Addisonian anemia and Biermer's progressive pernicious anemia are interchangeable terms which describe an identical disease and that moreover, this disease is not a true clinical entity but represents a state in the process of blood poverty from many obscure causes.

To anyone who has seriously compared the anemias clinically and pathologically, it becomes quite evident that the problem of classification

is by no means simple. The terms "secondary anemia" (that is, due to known or visible causes) and "primary", "essential" or "pernicious" anemia, (that is, anemia due to obscure causes and usually resistant to treatment) are not complete or exact. There is no sharp line separating the "secondary" from the "essential" anemia groups. Under this nomenclature it is common clinical observation that not rarely one form merges into the other. To the persistent, acute and brilliant efforts of Wm. Hunter, we are indebted for calling attention to and emphasizing a most vital and basic principle underlying the clinical, pathologic and hematologic features exhibited by the anemia described by Addison. Hunter's observations, it would seem, definitely segregate Addisonian anemia from the great group of severest anemias previously named generally, primary, essential, idiopathic or pernicious. After twenty-five years of patient endeavor, and work not generally directly appreciated, Hunter's views are in the main definitely substantiated by modern clinical investigation and the anemia of Addison segregated as a special form of anemia with a specific, probably group, etiology. It would seem to be now possible to define Addisonian anemia as essentially a haemolytic anemia. It would seem that further, it is specific, chronic anemia whose constant or intermittent haemolytic features are closely associated with sepsis or the consequences of such. This septic agent is generally intermittently active, extends over comparatively long periods of time and is associated with organisms or agents of the haemolytic groups. Such organisms or toxins invade tissue, are widely disseminated in the body, but probably have a special affinity for lymphoid tissue and their toxins a special destructive action upon lymphoid tissue. Such organisms are described variously as "streptococcus longus" (Hunter), "streptococcus viridans", "lytic staphylococci" and baccilli simulating those of the colon group. It is quite essential that these facts emphasized by Wm. Hunter in his septic theory should be appreciated. It is likewise necessary that the evidence of hemolysis in Addisonian anemia by recent investigators be recognized. These observations are basic as aids to the segregation of the type of anemia under consideration.

Characteristics of the Disease.—A brief review of the essential clinical features of the ailment would appear to be opportune. The disease may be (a) chronic, or (b) acute.

(a) Chronic Addisonian Anemia—This form of the disease is most frequently encountered. Clinically, it is not possible to improve upon the classic description of the ailment presented by Thos. Addison in 1855. It is as follows: "For a long period I have from time to time met with a very remarkable form of general anemia oc-

curring without any discoverable cause whatever—cases in which there had been no previous loss of blood, no exhausting diarrhoea, no chlorosis, no purpura, no renal, splenic, miasmatic, glandular, strumous, or malignant disease. Accordingly, in speaking of this form in clinical lectures. I, perhaps with little propriety, applied to it the term "idiopathic," to distinguish it from cases in which there existed more or less evidence of some of the usual causes, or concomitants of the anemic state."

The disease presented, in every instance, the same general character, pursued a similar course, and, with scarcely a single exception, was followed, after a variable period, by the same result.

It occurs in both sexes, generally, but not exclusively, beyond the middle period of life; and so far as I at present know, chiefly in persons of a somewhat large and bulky frame, and with a strongly marked tendency to the formation of fat.

It makes its approach in so slow and insidious a manner that the patient can hardly fix a date to his earliest feeling of that languor which is shortly to become extreme.

The countenance gets pale, the whites of the eyes become pearly, the general frame flabby rather than wasted; the pulse perhaps large. but remarkably soft and compressible, and occasionally with a slight jerk, especially under the slightest excitement. There is an increasing indisposition to exertion, with an uncomfortable feeling of faintness or breathlessness on attempting it; the heart is readily made to palpitate; the whole surface of the body presents a blanched, smooth, and waxy appearance; the lips, gums, and tongue seem bloodless; the flabbiness of the solids increases; the appetite fails: extreme languor and faintness supervene, breathlessness and palpitation being produced by the most trifling exertion or emotion; some slight oedema is probably perceived about the ankles. The debility becomes extreme; the patient can no longer rise from his bed; the mind occasionally wanders; he falls into a prostate and halftorpid state, and at length expires. Nevertheless. to the very last, and after a sickness of perhaps several months (or years) duration, the bulkiness of the general frame and the obesity often present a most striking contrast to the failure and exhaustion observable in every other re-

With perhaps a single exception, the disease in my own experience, resisted all remedial efforts and sooner or later terminated fatally. On examining the bodies of such patients, after death, I have failed to discover any organic lesion that could properly or reasonably be assigned as an adequate cause of such serious consequences; nevertheless, from the disease having uniformly occurred in fat people, I was naturally led to entertain a suspicion that some form of fatty degeneration might have a share at least in its production; and I may observe that, in the case last examined, the heart had undergone such a change, and that a portion of the semilunar ganglion and solar plexus, on being subjected to microscopic examination was pronounced by Mr. Quekett to have passed into a corresponding condition.

"Whether any or all of these morbid changes are essentially concerned—as I believe they are—in giving rise to this very remarkable disease, future observation will probably decide."

Clinically, to Addison's description may be added gastric achylia without stagnation, diminished pancreatic ferment secretion, frequent or intermittent exhausting diarrhoea, continuous or intermittent albuminuria, spinal cord changes usually of the spastic type, disturbances in sensation, particularly malfunction of the special senses and not rarely psychic upsets.

(b) Acute Type of Addisonian Anemia— This occurs infrequently. In 101 cases personally observed, it was present but four times. The following history emphasizes some of the clinical aspects of the acute form of the affection.

On January 12, 1916, there was brought to our clinic upon a stretcher a semi-conscious female aged 35. At the time of entry she exhibited low muttering delirium, lemon yellow, waxy, oily skin, pale, water logged mucus surfaces, extreme weakness and dyspnoea. The general body nourishment was moderately well preserved. The hemoglobin was 18%, the red cell count 920,000, the leucocyte count 2,300. The stained blood smear showed a large celled anemia, marked poikilocytosis and polychromatophilia and numerous normoblasts with an occasional megaloblast. The lymphocytes were 56% of the total differential count. The coagulation time was more than eight minutes.

The previous history of this patient is interesting. Up to Oct. 1915—three months before coming under observation, the patient was and had been in perfect health. So excellent had her health been that she was considered somewhat as a prize beauty in her county. In early October, she was affected with a form of sore throat with grippe-like sequelae, which lasted about ten days and left her much exhausted. The exhaustion continued, a lemon color pallor became noticeable, a swelling appeared below the edge of the left ribs, irregular temperature was recorded and five weeks following the initial illness a blood examination revealed the quantitative and morphologic picture associated with Addisonian anemia. The patient was removed to a hospital in one of the large cities of Iowa and a standard form of treatment instituted by a very competent internist. The patient made practically no progress. Anorexia, diarrhoea, dyspnoea, palpitation of the heart and mental changes became established. The swelling below the rib edge was proven to be the spleen, it persisted and increased and became so painful that deep breathing, lying on the left side, or palpation caused exquisite distress. The blood picture showed no change except quantitatively the hemoglobin and red cell mass slowly and steadily diminished.

In this striking picture, I would emphasize particularly the acute onset of the ailment in a previously well individual, the disease being initiated by a sore throat; the rapidly developing anemia in every respect that of a pernicious or Addisonian anemia: the clinical appearance of the patient in the space of a few months became that which is commonly associated with Addisonian anemia of long standing; the rapid and persistent enlargement of the spleen so painful as to be described by the patient herself as feeling like a "large boil." Further examination showed this case to be non-syphilitic. A haemolytic coccus was isolated from the throat and a similar organism from the tissue of the gall bladder and the spleen.

Blood Findings in Addisonian Anemia—Emphasis is to be placed upon the statement that the blood morphology set down by early investigators as indicating essential or idiopathic anemia or Addisonian anemia may be closely mimmicked in numerous forms of anemia where the cause is known or evident and that upon blood morphology alone or even upon quantitative blood studies alone, absolute diagnosis of the disease is not possible. The blood studies are only to be taken when considered with respect to the clinical course of the disease and possibly with regard to evidences of haemolysis.

Usually there are shown a low erythrocyte count (15%-50% of normal), the average being 1,200,000 (Cabot) while Quinke's case of 140,000 holds the record for low counts. The hemoglobin is decreased, but in lesser degree than the red blood cell count, thus making the color index greater than one in the majority of cases.

The fragility of the erythrocytes is increased. The platelets are diminished, often absent. The normal is 500,000 (J. H. Pratt), while in pernicious anemia they usually are less than 100,000 per cu. mm. The stained smear shows nucleated red blood corpuscles and multitudes of large and small, misshapen and contorted red blood cells. Cells measuring from two to twenty microns in diameter, (microcytes and macrocytes), "Dumbbells," "doughnuts", "pears", "commas", "ovals", "pseudopods" and "rings" (poikilocytes) are common. Nucleated red blood corpuscles are frequently present at some stage of the ailment. They vary in size and are designated microblasts, normcblasts and megaloblasts, accordingly. Cells

containing Howell's nuclear particles are often seen. These various blast cells represent the reserve currency of the bone marrow and indicate that the demand for erythrocytes is so imperative that the marrow, being unable to produce matured cells, throws off their parent form—the erythroblasts. The degree of the marrow's embarrassment is probably indicated by the type of blast found in the circulating blood, the more primitive the nucleated cell, the greater the call for red corpuscles. In very severe cases, however, no nucleated cells may be seen. This probably indicates almost complete marrow exhaustion

Besides nucleation, the circulating red blood corpuscles show polychromatophilia, reticulation, Ehrlich's "spotting", vacuolation and rarely basophilic degeneration.

There is a marked leukopenia, usually about 3,500, although counts as low as 330 and as high as 13,000 have been reported. Higher leucocyte counts are rare. They probably are associated with active infection or the free absorption of toxic agents which temporarily stimulate the defensive mechanism in the blood making centers. Evidence suggestive of this is adduced from the prompt leucocytosis following blood transfusion with or without associated splenectomy.

The leucocytes are of smaller size than normal, myelocytes more numerous and often basolphilic granules are seen in the cytoplasm. The differential counts usually show an increase in the small lymphocytes and a decrease in the polymorphonuclear percentages—in fact, the normal percentages are often reversed, so that lymphocytes outnumber polymorphonuclears three to one. Such reversal of the normal differential leucocyte ration might be interpreted as indicating diminution of the blood's defensive mechanism.

Changes in the Blood Plasma—Coagulation time is prolonged, but not so greatly as in hemophilia and icterus. Our cases ranged from 3 to 10 minutes. The appearance of the blood is watery, milky or greasy, and sometimes it is nearly impossible to smear it evenly on a slide. Ehrlich describes the flow from a puncture wound as "streaked". The volume of erythocytes, as determined by the hematocrit of Oliver, is lessened out of proportion to the serum, which is often pinkish in color from the free hemoglobin. The specific gravity of the serum, freed from corpuscles, is nearer normal.

Nayen and LeNoble say that the fibrin is decreased and that the clot in pernicious anemia does not retract even after 72 hours. Other observers do not agree with this statement. We have noticed that the clot is soft and insecure, and is easily dislodged.

Blandenhorn has recently demonstrated an

increase in the bile pigment in the blood in cases of Addisonian anemia. There would also seem to be variations in the cholesterin and iodine factors. It has not been constantly shown that the lytic bodies are increased. In certain cases it has been shown by Eppinger and by King that the blood serum contains an increase in the unsaturated fatty acids in the blood some of which have been shown to be highly lytic.

Pathologic Alterations—General—The most striking feature of the disease is the general fatty degeneration of the systemic nonstriated and heart musculature and of the liver, kidneys and bone marrow. All the body tissues are hydraemic except the spleen which is commonly firm and congested. Multiple small hemorrhages into the meninges, brain, spinal cord and retina are not uncommon. Such lesions are, however, not especially specific of Addisonian anemia. The researches of Hunter and others would, however, indicate that in Addisonian anemia there are specific changes which have been commonly overlooked by many observers.

Hunter lays particular emphasis upon the lesions in the mouth. It is a common observation that in many forms of severe anemia, infected gums, tonsils and nasal accessory sinuses are coincident. Not infrequently, the infecting organisms are haemolytic cocci or bacteria. Decayed, broken teeth are very generally noted. Hunter emphasizes the importance of these long persisting infections with respect a peculiar glossitis which he claims is quite characteristic for Addisonian anemia. We, ourselves, have noticed the tongue changes as being practically constant in haemolytic anemias of Addisonian type, in fact, we have never seen a true case of Addisonian anemia in which the tongue did not show varying degrees of atrophy of the mucous membrane and hyperplasia of the muscles of the tongue. Hunter claims that there is no other anemia in which the glossitis is so constant and persistent. He claims that the glossitis fluctuates in severity as does the disease and that the presence of the glossitis accounts for the alterations in the special senses, particularly of taste so characteristic of the disease. Hunter has shown that while in many severe anemias, superficial inflammatory changes of the tongue are quite common, in Addisonian anemia there is an actual invasion of the lymph spaces and muscle bundles of the tongue with lytic streptococci. Hunter claims that the tongue furnished the most important portal of entrance for these bacteria or their toxins into the general circulation. Tissue cultures from the tongue would apparently show these organisms in pure culture. Pathologic changes similar to those observed in the tongue have been observed in the stomach wall and that of the large intestine. In the early course of the disease, the gastro-intestinal lesions are of

the ulcerative type, later inflammatory action results in scar tissue with atrophy of the mucosa and muscularis. Haemolytic bacteria can often be isolated from the walls of both stomach and intestine, upon tissue culture after the technic of Rosenow.

In our clinic, tissue cultures have been made of removed appendices and gall bladders. While grossly all these appendices and gall bladders show chronic inflammatory changes with or without evidences of ulceration, in some of the specimens, streptococcus viridans, lytic staphlococci and organisms of the colon group have been recovered.

Besides fatty change and frequent enlargement, the liver presents a rather characteristic picture with respect to the distribution of iron pigment. The deposits of iron pigment are increased from six to ten times the normal amount. This increased iron is characteristically deposited in the outer and middle zones of the lobules. This increase of iron pigment does not occur as result of iron medication nor does it occur in secondary anemias to such extent nor in such position. By Charnas and Schneider's methods for the estimation of blood derived pigments, duodenal catheterized fluid appears to characteristically reveal a great increase in the elimination of urobolin and urobolinogen by the liver. In only the lytic anemias is this great increase in blood derived pigments constantly found. This observation is of the greatest value in separating instances of true Addisonian anemia from anemia where the blood morphology indicates a severe anemia often carelessly called "Addisonian".

Examination of the kidneys in pernicious anemia shows increased iron deposits. In the urine are demonstrated increased urobiligen and hetro- and perhaps iso-hemolysins.

Bone Marrow—Smears of the bone marrow reveal in the early stages of pernicious anemia megaloblastic hyperplasia in the majority of instances. This is apt to be succeeded by aplasia which represents an overwork of fatigue. In certain cases of Addisonian anemia aplasia may be early manifested. Bone marrow cultures have not been made in sufficient number of cases of Addisonian anemia to enable one to definitely state whether or no there is actual bone marrow infection. It would appear that the bone marrow changes are secondary and compensatory. They represent reactions to the haemolytic agent. It would seem in Addisonian anemia the bone marrow is not primarily at fault. Injections with pure cultures of staphylococcus pyogenes aureus cause definite bone marrow reactions closely resembling the megaloblastic reactions produced in Addisonian anemia. Following the injection of non-bacterial haemolytic agents as has been described by Bunting similar changes are observed. It is quite likely that in Addisonian anemia, wide spread infection with haemolytic cocci retards blood formation. This infection may actually exist in the bone marrow and bone marrow changes found in this disease represent an hyperplasia due to the hematopoietic tissues having to simultaneously resist damage consequent upon infection and to manufacture new blood cells.

Spleen—Spleens removed at laparotomy from cases of Addisonian anemia in our clinic almost universally show increase in size, blood congestion, chronic peri-splenitis and often increase in weight. On sectioning, the tissue evidences chronic hyperplasia. The iron content is greatly decreased. In some instances of Addisonian anemia tissue cultures from the spleen pulp have returned haemolytic cocci and colon-like bacilli. Spleen extracts do not exhibit increased iso- or hetero-haemolysins.

It might be well to review certain functions performed by the spleen. Even though the exact use of the spleen is unknown, it would appear from its embryology to be an important organ concerned with digestion or assimilation of food. It will be recalled the blood supply of the spleen comes from the coeliac axis as does that of the stomach, liver and pancreas. The spleen is derived from the fore gut as are also these organs. Its venous afferents are direct tributaries to the portal circulation. The chief functions of the spleen would appear to be those connected with control of blood formation and with blood destruction. In the human embryo erythocytes are produced by the spleen, but at birth this production ceases and the bone marrow becomes practically the sole source of the red blood cells. The spleen is, however, intimately concerned with the production of leucocytes. Kolliker and Ebener found more leucocytes in the splenic vein than in the splenic artery. The large mononuclears (splenocytes) formed in the spleen probably do not enter the blood stream but remain and serve as partial sources of haemolysis. There is reason to believe that even normally the spleen exercises a certain degree of inhibition upon the bone marrow, influencing the formation and the addition to the circulation of both red and white cells. Lethaus, Kuttner, Roetner and Lagg have noted polycythemia following the removal of the spleen traumatically ruptured. Schupfer, Levison and Muhsan and Mayo have similarly noted increased red cells following splenectomy in Banti's disease. The tremendous medullary reaction after splenectomy in pernicious anemia has been commonly noted. Sometimes the pain in the long bones following the operation is definitely associated with this increased medullary activity.

That the spleen bears a direct relation to iron metabolism has been abundantly proven by

the work of Ascher and his pupils, Schmidt, Voegel and Baer. It seems probable that the spleen is a depot for iron derived from destruction of the blood and tissue cells. The liver stores the iron coming to the body in food. After splenectomy Baer has shown a marked reduction in hemoglobin when animals receive but little iron in the food and rapid improvement when iron is added. Pearce has emphasized that the iron in uncooked food, particularly unboiled food is of greater benefit after splenectomy than that in cooked or boiled food and from this observation thinks that the spleen is in some way concerned with the process of digestion. Increased siderosis may be an indication, therefore, of general tissue cell destruction. Increase of iron bearing pigment in the liver and kidneys is, on the other hand, characteristic of active haemolytic processes and especially of active haemolysis in the spleen. Just what function the spleen has in digestion is not known. It may have some influence with respect to stomach and liver hyperemia. It does not seem to be directly concerned with the proper elaboration of pepsin and trypsin. Certainly after removal of the spleen in Addisonian anemia, Banti's disease, etc., there is a tremendous improvement in appetite, less gastric distress and frequently of vomiting. The relation of the spleen to the ductless glands and the haemolymph nodes is still undetermined. Certainly after splenectomy, enlargement of the thymus, thyroid and haemolymph nodes is not uncommon. Such have been noted by Tizonni, Mosler, Warthin and Dock, Pearce and Austin and others. The latter observers have shown that after splenectomy in dogs there is a great increase of the endothelial cells in the lymph nodes and have found that these cells may become phagocytic for erythrocytes following the injection of haemolytic serum. Eppinger has pointed out that the failure of splenectomy to benefit certain cases of pernicious anemia may be referred to the increased haemolytic activity of many newly formed haemolymph glands.

The relation of the spleen to infectious disease has been frequently commented upon. It has been generally supposed that the spleen acts as a power for good in the struggle against infections. There is no evidence to show that immune bodies are more favorably developed in the spleen than they are in other organs. Patients without spleens have not rarely been shown to survive from severe infectious disease. It may be that in such circumstances the haemolymph nodes take on the function of the spleen. The relation of the spleen to neoplasms is worthy of notice, primary cancer of the spleen is extremely uncommon. The injection of spleen emulsion into rats has been shown by Osser and Pribam to be followed by retrogressive changes in rat tumors. Murphy has shown that rat sarcoma will grow freely in chick embryos only before the development of the spleen. Carroll has found that connective tissue growth is greatly activated by extract of adult spleen. Eppinger on the other hand has shown that the removal of the spleen in man may be followed by greatly accelerated tumor growth.

The relation of the spleen to haemolysis— Under normal conditions there is maintained a delicate balance between blood destruction and blood production. The bone marrow reacts sensitively to increased carbondioxide tension of the blood to the products of red blood destruction and to many chemical and infective agents. It is not to be doubted that normally the spleen prevents entrance into the blood stream of materials which would stimulate excessive bone marrow activity. Normally there is little, if any, active destruction of red blood cells in the general circulation. Their slow destruction is brought about mainly by the spleen although there is some haemolysis in the liver and bone marrow. The spleen causes red cell destruction by autolysis and by phagocytosis. The iron of the blood cells is deposited as an albuminate of iron mainly in the spleen and is used later in the formation of new red blood cells and haemoglobin. In the absence of the spleen, Gilbert. Chabrole and Benard have demonstrated that the liver may transform hemoglobin into bile or bile pigment.

In Addisonian anemia, numerous authors notably Kelliger, Banti, Minkowski, Hunter and Chauffard and Eppinger assign a very active role in the haemolysis to the spleen. They maintain that in this disease, there is a definite hypersplenism and that the red blood cells are destroyed far in excess of their rate of manufacture by the bone marrow. Other observers as Ponfick, Goodall and Achard maintain that the spleen is increased in size in pernicious anemia as the consequence of the excessive quantity of products of blood destruction brought to it. It is also maintained that a combination of the two views is possible namely that blood destruction may be primarily initiated elsewhere than in the spleen and that as a consequence of the toxic products brought to it, the spleen responds with an overwork hyperplasia with the resultant overnormal haemolysis. Under such circumstances it is apparently evident that the removal of the spleen in an ailment such as Addisonian anemia cannot cure the disease unless the primary haemolytic fault is eradicated.

Effects of Splenectomy—In our clinic, Percy has observed that immediately after splenectomy a polymorphonuclear leucocytosis generally appears, due probably to necrosis of tissue following operation, being a chemotactic, phagocytic reaction. The nucleated red blood corpuscles become more numerous at first, especially

Howell's cells, after which they gradually disappear from the circulation.

After a slight fall following the operation, the red blood count and hemoglobin steadily rise. The stomach symptoms are improved, and there is a decided gain in weight and strength. In some patients a sensitiveness of the long bones is present. The red cells tend to lose their misshapen condition and become more uniform in size. Lee, Vincent and Robertson say that products of red blood corpuscle destruction (i. e. bile pigments) decrease in the excreta-the cells become more resistant to hypotonic salt solutions. Platelets appear or increase in numbers—the color-index falls to approximately one, and the normal ratio between polymorphonuclears and small lymphocytes is gradually established after the initial polymor-phonuclear leucocytosis declines. The abnormal blood cells generally disappear in from six to twelve weeks.

The Problem-From the above clinical review of the work of others and ourselves, it would appear that the problem of treatment embraces certain fundamental principles. It would seem that in the proper treatment of true Addisonian anemia the clinical and therapeutic treatment indicated includes the (a) attempt to bring the patient's blood serum within the biologic normal by such procedure as diluting or antagonizing lysins and supplying and stimulating the production of specific protective anti-bodies; (b) the attempt to radically remove active foci containing lytic bacteria or to counteract the constant or intermittent absorption of their toxins or their spread to new localities; (c) the attempt to stimulate normal red cell production in the bone marrow or to temporarily substitute an adequate number of normal red blood cells until bone marrow damage is repaired; (d) the attempt to improve the patient's general state by stimulating or supplying normal alimentary secretions, preventing the absorption of injurious digestion products from the digestive tract, stimulating the circulatory mechanism and the excretory function of the liver, kidneys and surface glands; (e) to attempt the protection of newly formed and old red blood cells in selected cases by removal of the hyperlytic spleen and intra-abdominal infected tissue.

TREATMENT—(a) The attempt to bring the patient's blood serum within the biologic normal. Instances have been not infrequently reported where there was rapid improvement in the qualitative and quantitative analysis of the blood following saline transfusion or copious lavage of the gastro-intestinal canal with normal salt solution. In these instances, doubtless the improvement resulted from the dilution of inimical agents in the blood stream. It would appear more physiologic to bring about such change

by such procedure as transfusion of all or part of the constituents of normal blood. We have used transfusion with whole blood (uncitrated and undiluted) because it seemed more rational to add nothing to transfused blood nor take anything from it (as by the citration of blood or its defibrination). In all instances we have found the Percy modification of the Kimpton-Brown method a practical and useful clinical procedure. Donors have been selected by the method suggested by Walter Brem. In our cases, the average number of transfusions were 3.5 given at six to ten day intervals and the average amount of each transfusion was approximately 650 c.c. Not rarely, the patient requires transfusions even after laparotomy. In such instances, continued anemia is apparently due to a persistance of the primary haemolytic agent and to increased blood destruction consequent upon the paraspinal haemolymph nodes taking up the function of the spleen. We have found transfusion the quickest and most satisfactory way of counteracting relapses and stimulating general metabolism.

- The attempt to counteract the effects of low grade infection-While the patient is being transfused (at intervals) search for local infective foci is carefully made. Radiographic cultural, and physical evidences of such are commonly found in tonsils, about teeth roots, in the sinuses accessory to the nose, and occasionally in the ear or in superficial lymphgland change. When such have been located they are radically removed as far as practical. Particular attention is paid to the removal of infections about the mouth or thoat where in this type of ailment they appear to be particularly common. As we have above mentioned, emphasis has been placed upon this condition by W. Hunter. Our cases strongly substantiate many of Hunter's observations. The improvement in general well being and the character of the blood has not infrequently been very prompt and marked.
- (c) The attempt to stimulate normal red cell production includes frequent massive transfusions as well as attention to the general body demands. It has frequently seemed to us that the chief function of transfusion appeared to be that of supplying blood function physiologically and giving the bone marrow an opportunity to recuperate. It has seemed not unlikely that the circulation of good blood in the bone marrow locally destroyed harmful agents and later on permitted a bone marrow blood production of increased vigor and approaching normal in quality.
- (d) The attempt to improve the patient's general state—Many of our cases of Addisonian anemia exhibit evidences of general undernourishment either chronic or intermittent. It is not sufficient that enough food be taken but

it is necessary that a proper amount of food be absorbed into the lymph or blood stream. All of our cases have exhibited gastric achylia with good motility. By clinical and laboratory tests pancreatic achylia especially for proteins and fats has been demonstrated. Quantitatively the bile has been normal or is increased in amount, but qualitatively there have been such departures from the normal as excesses of blood derived pigments and possibly such agents as stimulate pancreatic flow or the production of duodenal or jejunal secretions. Dietetically we have, therefore, suggested a diet limited with respect proteins and fats. The digestive function has been improved by the use of hydrochloric or tartaric acid following meals and frequent doses of calomel, not for the purpose of moving the bowels, but with the object of bringing about a relative sterility of the intestinal canal. In a few instances, various preparations of enzymes have been administered along with large doses of calcium carbonate, but part from the diminution in the volume of the stool we have not noticed that their value has been great. The renal activity has been stimulated by the free ingestion of pleasant table waters or by distilled water and the cardiac mechanism generally responded satisfactorily to rest, massage, frequent baths, caffein or digitalis. It is important to keep patients affected with this ailment at rest in bed especially during the periods of transfusion. There is no objection to their being out-doors in all kinds of weather, provided they are properly protected from sunburn or extreme degree of cold.

The attempt to protect newly formed and old red blood cells by surgical procedure-Inasmuch as in certain instances of Addisonian anemia it appears that intra-abdominal foci of infection exist and that there is increased blood destruction by the spleen and the hemolymph nodes, certain cases that were in fair physical shape, whose blood picture could not be kept improved by transfusion, removal of superficial foci of infection, diet, etc., and in whom there were not evidences of extensive or progressive ecrebro-spinal damage, have submitted to a laparotomy. Such laparotomy should always be exploratory in the fullest sense of the word. Not infrequently the surgical operation of splenectomy is performed, but only rarely does laparotomy reveal that the spleen alone is diseased. In only six of fifty-seven consecutive instances was splenectomy alone performed. In 53 cases, the spleen, gall bladder and appendix were removed; in 5 cases the spleen and gall bladder, and in 4 others the spleen and appendix. Tissue cultures from the gall bladders and appendices removed, as has been mentioned above, not rarely disclosed active infections with lytic cocci or bacilli of the colon group. Such organisms

have also been isolated from removed ovaries and tubes.

RESULTS—With respect to results following the mode of treatment suggested, the following summary can be given.

Effects upon the blood itself-In cases that have run from 6 to 59 months following multiple blood transfusions, eradications of local foci of infection and splenectomy, there has been an average hemoglobin gain of 43 per cent. There has been an average gain of red cells of 3,322,000 and this gain has in general been well maintained. Study of blood smears shows an absence or diminution of nucleted red blood cells in 94 per cent. There was a decrease in the color index in 68 per cent. There was a permanent increase in the leukocytes in 88 per cent; a decrease in coagulation time in 66 per cent; a decrease in polychromatophilia in 56 per cent; and the establishment of a relative polymorphonuclear leukocytosis in 61 per cent: a reduction relatively in lymphocytosis in 55 per cent; and a definitely demonstrable gain in blood platelets in 61 per cent. The immediate effect upon the blood then is almost uniformly that of improvement. The effect upon the patient's well-being generally is of the greatest interest.

Patients frequently improved, clinically, out of all proportion to the apparent improvement in the blood picture. Improvement in appetite. strength, mentality and initiative are in certain instances strikingly rapid. In favorable cases the patient may gain as much as a pound in weight daily. Within a month to six weeks a previously bedridden invalid may walk from the hospital carrying his own baggage. As to the permanence of these results no one can at present state. One case treated 59 months ago is in most excellent shape after having been a useless invalid for more than two years previously. All we can say at this time is that by multiple massive transfusions of the whole blood, careful eradication of foci of infection wherever such exist, and by splenectomy we are able to bring about the most rapid and the greatest "remission" (if we conservatively care to use such term) that can be brought about by any known means of therapy at our command.

Patients with cord symptoms do poorly, even though the red cell count and hemaglobin may be kept to fairly high levels. The cord damage appears to progress steadily in spite of improvements in the tone of the blood. It further follows that in all anemias, evidence of spinal cord damage should be carefully searched for. The finding of definite spinal cord damage limits the prognosis to a greater extent than does quantitative and qualitative changes in the blood.

Instances of aplastic anemia do poorly, in spite of all methods of treatment. In the remaining groups of cases of these severe anemias

the outlook is fairly encouraging. Fully 25 per cent of patients, treated by methods we have outlined have remained clinically well for from two to four and one-half years; about 40 per cent have greatly improved and have been transferred from the bedridden type of patients to the ambulatory class. Nearly 30 per cent have been benefited for but a short time and the disease has recurred in a form similar to that which existed before treatment was carried out.

In view of the fact that it has been the experience of men who have handled large numbers of patients affected with so-called "pernicious" anemia that by the old methods of treatment 97½ per cent of the patients have died after the disease has existed for three years, it would seem from the facts which we have submitted that treatment along the lines suggested offers at present the greatest hope for patients with this disease.

1002 N. Dearborn St.

PHYLACOGEN

J. E. BOURGET, M. D., Montreal, Quebec.

The object of writing this paper is to show my confreres the advantages of Phylacogen over any other product. It requires a certain amount of experience and good judgment if one is going to look for success. Like any other remedy, it should be used rationally, but most of all it should be given a chance to act.

About a year ago my attention was called to the use of Phylacogens. At that time my brother was suffering from an abscess of the rectum. This was his fourth attack. Previous to that I had used all sorts of treatment indicated in such a case and invariably I had to resort to surgical treatment.

I used vaccine with no results and was rather skeptical when Parke, Davis & Company recommended me to the use of Phylacogen. Nevertheless, willing to try anything to cure my brother of this infection, I tried Mixed Infection Phylacogen and gave him in all three doses, 1 c. c. every day. In four days the abscess had completely disappeared, which was the size of a good sized egg. I did not have to try any surgical intervention, it seemed to me that it was simply remarkable since my brother has had no complaints whatever. I might say that for years my brother had also been suffering from furunculosis, and since I used Mixed Infection Phylacogen in this particular case he has never had the slightest trouble or symptoms of furunculosis.

The next case I had was a case of furunculosis which I treated with daily injections of 1 c. c., using Mixed Infection Phylacogen and in four days patient was completely recovered and no recurrences.

Then came the epidemic of influenza in October, November and December, in which I had

over 175 cases, which all recovered with Phylacogen treatment alone, with the exception of one fatality and that attributable to nephritis. It would be too hard a task to enumerate every single case by itself, and I just want to specify the most interesting of all.

No. 1. Patient, a child 8 years old, temperature 102, pulse 140-150. Child had been sick with influenza for about three days when I was called in and found this condition. I gave the child 1/2 c. c. of Mixed Infection Phylacogen daily, and after four days temperature started dropping, yet I found consolidation of the left lung complete. Respiratory murmur had disappeared. Diagnosis was purulent pleurisy. On the thirteenth day from the onset of the disease the family called in another physician who said the child had to be operated on immediately. I was called in on the same day and told them that there was no such necessity and that I would go on with my treatment. I continued my ½ c.c. doses of Mixed Infection Phylacogen, increasing it to 1 c. c. a day until 20 injections were given in all, and the child was completely recovered on the twenty-third day of the disease without any surgical intervention and to the amazement of my colleagues who advocated surgical operation.

No. 2. Patient, a woman, 35 years of age, had been sick for three days. When I saw the patient I found a temperature of 104 with a pulse of 140. A tremendous amount of albumin present; although I did not have an opportunity of making a quantative analysis I can say that in a quantity of 2 ounces, in using the acid test, I had 7/8 of an albuminous precipitate. My diagnosis was "flu" with nephritis. I started in with ½ c. c. Mixed Infection Phylacogen twice a day, the next two days 1 c. c. twice a day; the third day I did not give any, and the fourth day I found that 4-5 of the left lung was congesting. On that day, the fourth day, I gave 4 c. c. of Pneumonia Phylacogen three times a day, fifth day 5 c. c. of Pneumonia Phylacogen three times a day, sixth day 5 c. c. of Pneumonia Phylacogen three times a day, seventh day 5 c. c. of Pneumonia Phylacogen three times a day, and on the eighth day 5 c. c. of Pneumonia Phylacogen three times a day. Patient perspired enormously, no chills and no passage of urine. After the fifth day of treatment pronounced rales yet it seemed to me the lung started to decongest, but on the ninth day patient died, with temperature of 107 2-5 taken on the arm, which I attribute exclusively to nephritis since the kidneys could not eliminate any toxins.

No. 3. Boy, 23 years of age. Had been sick with the grippe for four days, been treated with all sorts of household remedies. Temperature dropped on the fourth day to normal. Boy left the house and on the seventh day he is sick again, with temperature of 104. I was called in and

my diagnosis was pleurisy. Sharp pain on breathing in left lung with consolidation and dry cough, difficulty of expectoration. I succeeded in giving Mixed Infection Phylacogen 1 c. c. twice a day during two days. On the third day the pain left but consolidation persisted. Patient expectorates much easier. Continued with 1 c. c. once a day for another five days, after which time temperature dropped, but consolidation disappeared only two days after the temperature dropped to normal. Patient at the time of this writing is enjoying the best of health.

No. 4. What I found as a very extraordinary case was a woman 40 years of age, who was confined during the epidemic and it was her eleventh child. Twenty-four hours after the confinement her temperature rose to 104. I gave her 1 c. c. of Mixed Infection Phylacogen twice a day during four days. Temperature dropped to normal and the woman has completely recovered.

Since using Pneumonia Phylacogen have observed that in the general run of cases the temperature does not exist, at the longest, five days; in a happy medium of cases (about 85 per cent) the temperature keeps on three days; in 10 per cent of cases about four days, and 5 per cent about five days. I never found from all those cases (approximately 170) any complication such as pneumonia or pleurisy.

No. 5. Here again I have in mind a little girl of 9 years who had pneumonia a year ago. I was called in, temperature of 105. I gave her 1 c. c. of Pneumonia Phylacogen. Twenty-one hours after the injection temperature dropped to 98. This simply to illustrate that if we give Phylacogen at the onset of the disease we get the best results.

Patient 35 years of age, who was treated at home with household remedies, expectorants, aspirin, and so on, for twelve days. When I was called in I found temperature of 104. Three daily injections of 1 c. c. of Mixed Infection Phylacogen brought the patient back to perfect health.

After I had all that success in the treatment of "flu" and its complications with Pneumonia and Mixed Infection Phylacogen I tried it on a case of erysipelas. I gave Mixed Infection Phylacogen 1 c. c., during four days and the results were absolutely nil. Then I changed to Erysipelas Phylacogen and gave 1½ c. c. twice a day during two days and 1½ c. c. once a day for another two days. Complete cure effected after treating the patient with Erysipelas Phylacogen during four days. At the onset of the disease had a daily temperaturue of 103 and 104 which disappeared on the second day after I started treatment with Erysipelas Phylacogen.

In closing this report I wish to emphasize that Phylacogens will give results if we adhere to a few very important principles, namely:

First—It is imperative to establish the proper diagnosis.

Second—The question of dosage does not mean we have to go by literature and give invariably the same dose, we have to be guided by individual cases because we do not exactly treat the disease but we treat the case; here is why we have to pay special attention to the individual, one may be more susceptible and another case may be less susceptible to proteids.

In my long experience in Phylacogens I found the best thing to do is to give adults 1 c. c., children, according to age, from one-quarter to one-half c.c. of Phylacogen as an initial dose to test their susceptibility. By this I am guided in my next injection and will know exactly how much Phylacogen to give. I am increasing the dose each time until I get the desired reaction. What I want is profuse perspiration but no chills.

Third—Intervals between doses. One injection of any Phylacogen a day seems to me a loss of time, and one actually could not get any results from it. I certainly think that in acute infections three daily doses is the most rational; in less severe cases I have had good results with a morning and night injection.

I am simply relating these facts for the benefit of my confreres because I have often seen statements made erroneously, that Phylacogens will not give results; now why, simply because one or two injections were given, eventually a small dose at that, and it would be an extraordinary thing if we could combat an infection in such short time as they would have to institute rational progressive treatment. I was skeptical. as said before, when I heard of Phylacogens first. but my experience with so many cases treated successfully with Phylacogens has entirely changed my attitude toward them, and I would not think today of treating any case where infection is present with anything else but Phylacogens.

The W. G. Cleveland Co. has decided to make its general headquarters in St. Louis, and is transferring offices and equipment from Omaha. The success attending the opening of the St. Louis house was so pronounced that it was determined to concentrate at this point to meet the rapidly increasing trade.

A VALENTINE

Send me, dear Heart, a valentine, Let it be roses red as wine; Or let it be violets wet with dew, Just so it's something, dear, from you.

Let it be foolish, paper lace, With two red hearts in close embrace; Small matter if it is old or new, Just so it's something, dear, from you. Continuing "The Medical Fortnightly and Laboratory News."

The Medical Herald

and Electro-Therapist

Incorporating the

Ransas City Medical Inder-Lancet

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Vol. XXXIX

FEBRUARY 15, 1920

No. 2



Influenza Prediction Fulfilled

In the November 8 issue of the London Lancet appeared a prediction by Dr. John Brownlee, D. Sc., based on a careful study of past influenza epidemics, that a recurrence of the 1918 influenza epidemic would occur in January or February, 1920.

Doctor Brownlee found that influenza epidemics recurred at intervals of 33 weeks, providing the thirty-third week did not fall between June and December, in which case the recurrence would be expected at the end of 66 weeks or 99 weeks, and therefore he regards the fall epidemic of 1918 as an exception to the rule. In the United States we are now having a recurrence after 66 weeks.

It is now exactly 66 weeks since the mortality peak of the 1918 epidemic in Chicago. The same is true for New York City and Washington. In all three of these places influenza is now epidemic.

The periodicity suggests that we may be dealing with infecting organisms which not only have the power to reproduce themselves in a virulent form continuously for a long period if susceptible persons are exposed, but which also have the

power of developing in cycles of 33 or 66 weeks.

The recurrence might be explained on the hypothesis that immunity has lasted 66 weeks, though this hypothesis does not explain the fact already noticed in some families that those attacked in 1918 are now immune, while those not attacked in 1918 are now contracting the disease. The more reasonable explanation seems to be that the present epidemic is due to a definite cyclical regrowth of the infecting organisms from the seed of the former epidemic.

Definite cycles of development are common in the known vegetable and animal world; some plants flower annually, some biennially; the malarian organism may complete its cycle in two or more days; the locust requires in some cases 17 years.

Similarly the organism responsible for our recent pandemic may complete its cycle in 33 weeks or perhaps 66 weeks. This recurrence of the epidemic after 66 weeks certainly strengthens the view that the epidemics of 1889, 1890, 1918 and 1920 all have a common etiology.

Food Poisoning

In regard to food poisoning, the last official report from our government concerning botulinus poisoning—olives, canned fish, foods generally, declares that it occurs only in spoiled food, where the odor, appearance, ballooned can or other distinctive features should arouse one's suspicions. It may exist in home canned goods or in factory products, just how it gains entrance has not been determined. Antidote—be observant. J. M. B.

Team Work

The questions of popular interest at present, how are patients to gain the advantages of specialization in medicine and at the same time escape the dangers of a one-sided study?

The making of a diagnosis, whether by a general internist or by a specialist, involves the application of the methods of reflective thought to the solution of a problem.

The generl diagnostic survey by the internist is very different from the problem of the specialist in a single domain.

The internist surveys the patient as a whole psychophysied organism, the specialist a small part of the organism.

The internist should know enough about the methods of all the medical and surgical specialties to realize how to value their application in a given case; he should gain the co-operation of groups of skilled specialists, examiners whose objective findings he can rely upon, judge their importance or unimportance, in relation to the patient's whole state. Such studies demand close

co-operation between the general diagnostician and the specialists. Even a surgeon, viewed from the standpoint of the general diagnostician, is to be regarded mainly as a specialist in therapy.

The solution of the dignostic problem lies in group work, each member of the group possessing special skill in some particular kind of work, and one member, acting as integrator, combining the single parts into a properly proportioned whole. The integrator should preferably be a person who is rather encyclopedic in training and comprehension, sympathetic and tolerably familiar with work in all the divisions of modern medicine and surgery, free from prejudices, disciplined by sufficient experience in hospital wards, in clinical laboratories, and in the autopsy room, and blessed with that common sense which is, in the last analysis largely a sense of proportion.

Specialism, co-operating in a group, instead of acting as a disintegrating force, may be made to contribute to a higher unity, most helpful, both to the public and to the profession. Such a system does not restrict any specialist or any integrator to activity in a single group, but he may participate in other groups. Examination by every member of a group is no necessity in most cases, but is so in obscure cases.

Among real experts, one will choose those that can give the information that is relevant The integrator must be sensitive to the problems that confront him, and how to apply the best skill in attacking and solving them. Poor diagnosis means poor treatment.

P. I. L.

The Patient Himself

While with the multitudinous additions to the laboratory diagnosis methods, we are coming to know the diseases of the special organs more and more, the patient himself and his personality are coming to be, according to Dr. H. T. Patrick, Chicago (Journal A. M. A., Jan. 10) a little too much neglected. His personality is what he is, the man himself—it is the biggest thing to us: its disorders are as important to himself and to society as any disease of his organs. Life is full of conflicts in the effort to adapt ourselves to conditions under which we exist. An easy way to approach their consideration is in the war neuroses, in which the conflict is so apparent. It is through a neurosis that the soldier who cannot stand the conditions is able to avoid them. If he loses an arm he is discharged, but if he does not, shell shock is better than existence in the trenches. Peace neuroses are just the same -they are a way out of trouble or a means of avoiding an obstacle; a way selected more or less unconsciously. Some ways of avoiding intolerable conditions are simpler; a man may get drunk and beat his wife, but under war conditions he is just the one to get a lame back or sore feet. The neurotic individual is a person in trouble without ready means of escape—the neurosis is defense reaction. Very often the nervously inadequate person unconsciously shifts the responsibility to some bodily disease. Patrick asks how many of us keep in mind that with all our civilization and culture we still retain the instincts and passions of the cave man. In this connection Patrick alludes to the sexual element, which, without accepting the views of Freud and the psychanalysts, has a great deal to do with the starting of nervous disorders. The medical tendency, however, seems to be to give too much attention to the concrete and tangible. If organic disease is found our tendency is to stop there; it is the most facile explanation. When a man is disabled by an organic disease or abnormality, he says, that apparently does not measure up to disability, one should take the precaution to look for a neurosis which really makes the trouble. Patrick has elsewhere emphasized the importance of recognizing fear as a cause of neuroses, and this is especially true, he says here, of the common apprehension of losing one's mind or of getting cancer or a similar disease. Another point he makes is the frequency of mild melancholia, and he believes that many of the suicides are due to this unrecognized cause. Disturbing experiences, even when possibly forgotten, are another cause of neuroses, and he gives examples of all these possibilities, too often overlooked by the attending physician. Some of us may be guilty. as physicians, of slighting all these facts, even when they are patent to us, and neglecting the proper treatment. The neuropath may become a useful member of society if his condition is duly recognized. The object of treatment is so to mold the patient that he will fit his environment and so to arrange his environment that it will fit him. Sometimes, however, this cannot be done. The patient must be frequently shown that it is possible for him to do things which he thinks he cannot do, and our job is to make him equal to the task from which he is trying to escape. It is not enough to say, "Don't worry, for your trouble is not serious"; but wholesome. satisfactory ideas must be sutstituted, and in the vast majority of cases a satisfactory occupation is one of the best means. The emotional temperamental patient, when rightly placed and emploved, is often capable of being one of the most enthusiastic and optimistic individuals, in many cases at least. "Ours is the task." Patrick says. "to strengthen their intellectual control," and as far as possible to lighten their morbid sensibilities and burdens.



Successor to Surgeon General Blue — The president has nominated Dr. Hugh S. Cumming as surgeon general of the U. S. Public Health Service to succeed Surgeon General Rupert Blue, whose second term expired January 13. Born at Hampton, Va., August 17, 1869, Dr. Cumming was graduated from the University of Virginia in 1893, and from the University College of Medicine, Richmond, in 1894. He was commissioned assistant surgeon May 25, 1894, passed assistant surgeon five years later, attained the rank of surgeon March 15, 1911, of senior surgeon Nov. 8, 1918, and was appointed assistant surgeon general March 6, 1919. Dr. Cumming's professional interest has been mainly in the field of preventive medicine and quarantine.

Venereal Clinic Opens—A venereal disease clinic was opened at St. Joseph, Mo., on January 17, in Community Hall, with forty-six patients. An effort was made to have the clinic financed by the city and operated by the city board of health, but the necessary funds were not available. The local Red Cross chapter then gave \$5,000, which insures an equal amount from the Chamberlain-Kahn fund. The clinic is under the management of a committee of seven—three Red Cross, three members of the city board of health and Dr. J. F. Owens, representing the Buchanan County Medical Society.

An Ideal Antiseptic—Aromatic chlorazene is a compound admirably adapted to general use when the needs of a thorough antiseptic exists, in the family, factory, shop, in travel or hospital work. It suggests itself as a gargle, mouth wash, nose or throat spray, or for any of the body cavities. It is pleasant, harmless, does not coagulate albumen and is more promptly antiseptic than the usually employed substitutes of carbolic acid or bichloride. It is put up by the Abbott Laboratories of Chicago. Each bottle carries with it a wooden cup for measuring the regular amount to be used.

Officers Elected—At the annual meeting of the Central Kansas Medical Society, held in Russell, December 17, Dr. Frederick S. Hawes, Russell, was reelected president and Dr. Leo V. Turgeon, Wilson, secretary-treasurer. Wilson was selected as the next place of meeting. At the December meeting of the Bourbon Medical Society held in Fort Scott, Kansas, Dr. Robert Aikman, Fort Scott, was elected president; Dr. Claud F. Young, Fort Scott, vice-president; Dr. John C. Lardner, secretary, and Dr. Millard F. Jarrett, Fort Scott, treasurer.

The Carnegie Corporation of New York has announced its purpose to give \$5,000,000 for the use of the National Academy of Sciences and the National Research Council. It is understood that a portion of the money will be used to erect in Washington a home of suitable architectural dignity for the two beneficiary organizations. The remainder will be placed in the hands of the Academy, which enjoys federal charter, to be used as a permanent endowment for the National Research Council. This impressive gift is a fitting supplement to Mr. Carnegie's great contributions to science and industry.

Congress on Internal Medicine—The American Congress on Internal Medicine will meet in conjunction with the American College of Physicians in Chicago, February 23 to 28. The sessions will include daily clinics and laboratory demonstrations in hospitals and teaching institutions, and evening meetings, one of which will embrace the fourth annual convention of the American Congress of Internl Medicine.

Electro-Therapeutic Week in Kansas City—The week of May 23-28 has been selected by Dr. B. B. Grover for his second course of lectures on Electro-Therapy, full details of which will appear in the next issue of the Herald. The lectures will be followed by the annual meeting of the Western Electro-Therapeutic Association, May 27 and 28, at which time a number of men of national repute will present papers.

The Missouri State Medical Association will hold its annual meeting at Jefferson City, April 6, 7, 8. The reason for an earlier date is the fact that the American Medical Association will meet earlier this year in New Orleans, the dates April 26-30. (Secretaries of other state societies are requested to send us their dates.)

Public Health Laboratory—The secretary of the state board of health announces the reopening of the Public Health Laboratory at the School of Medicine, Rosedale, under the direction of Dr. Donald R. Black, Kansas City. At this laboratory free examinations will be made, the gonococcus infection, an the Wassermann test given.

Dr. Jefferson Davis Griffith, of Kansas City, will be tendered a banquet on March 4 by the Jackson County Medical Society, to commemorate the day the doctor entered the practice of medicine, fifty years ago.

The Burnt Child—Denmark is putting in the most powerful wireless in the world. The next time a Dr. Cook comes along she'll be able to check him up before she hands any flowers on him.

Dr. Thomas E. Holland, of Hot Springs, Ark., one time president of the Medical Association of the Southwest, died December 21, aged 70 years. More extended notice next month.

The Western Electro-Therapeutic Association

Organized in Kansas City on May 8th, for the purpose of cultivating and promoting knowledge in whatever relates to the scientific application of electricity and other physical measures in medicine and surgery.

OFFICERS FOR 1919-1920

President. Dr. B. B. Grover, Colorado Springs, Colo. First Vice-Pres. Dr. W. P. Grimes, Kansas City, Mo. Second Vice-Pres. Dr. Theo. F. Clark, Eldorado, Kas.

Secretary. Dr. Chas. Wood Fassett, Kansas City, Mo. Treasurer.....Dr. Chas. Keown, Independence, Mo. Registrar......Dr. E. A. Nelson, Phillipsburg, Kas.

TRUSTEES

The next meeting will be held at Kansas City, Mo., May 27 and 28, 1920.

President Grover's Page

In accordance with the by-laws of the Western Electro-Therapeutic Association, your president has appointed the following named members of the association on committees for the year:

1. On Continuous Currents and Apparatus:

Chairman, E. E. Shaw, M. D., Cameron, Mo.; D. A. Iliff, M. D., Cherokee, Kas.; R. H. Hannah, M. D., Prague, Okla.; Chas. Keown, M. D., Independence, Mo.; O. U. Need. M. D., Oak Hill. Kans.

Mo.; O. U. Need, M. D., Oak Hill, Kans.

2. On High Frequency Currents and Apparatus:
Chairman, H. W. Nye, M. D., Osborne, Kans.; W.
P. Patterson, M. D., Springfield, Mo.; E. A. Nelson,
M. D., Phillipsburg, Kans.; W. F. Roney, M. D.,
Marysville, Kans.; C. F. Gardiner, M. D., Colorado
Springs, Colo.; L. B. Foster, M. D., Walters, Okla.

3. On Static Currents and Apparatus: Chairman, James Y. Simpson, M. D., Kansas City, Mo.

4. Helio-Therapy and Ultra-Violet Ray:

Chairman, Charles Keown, M. D., Independence, Mo.; E. E. Shaw, M. D., Cameron, Mo.

5. Vibration and Physical Therapy and Apparatus: Chairman, C. F. Craig, M. D., Kansas City, Mo.; W. J. James, M. D., Excelsior Springs, Mo.; Dorothy D. Allen, M. D., Mankato, Kans; T. F. Clark, M. D., Eldorado, Kans.

6. Hydrotherapy:

Chairman, D. Gaede, M. D., Weathersford, Okla.

7. Committee on Research:

Chairman, O. J. Cunningham, M. D., Kansas City, Mo.; C. F. Martin, M. D., Kansas City, Mo.; F. I. Iuen, M. D., Kansas City, Mo.; W. J. James, M. D., Excelsior Springs, Mo.

8. Committee on Arrangements and Exhibits: Chairman, Chas. Wood Fassett, M. D.; C. F.

Mills; Maurice Levison, Kansas City, Mo.

It is expected that the chairman of each committee will collate all the information possible on the various electrical and physical measures pertaining to his section and that he will present the indications for use and methods of employment of apparatus, in a written report and file the same with the secretary of the association before April 15, 1920. These reports will be read at the annual session. In case the chairman is not present, his report will be read by some member of the committee appointed for that purpose.

All reports become property of the association and upon being read shall be filed with the secretary.

Each and every member of the association is expected to contribute something from his personal experience that will be of interest to the association. Do not expect the chairman to do all the work. It is up to every member to do his share toward making the next annual session an unqualified success.

RRG

In a marked cystitic a swollen edematous ureteric edge may give to the ureteric opening the draggedout, golf-hole appearance indicative of a tuberculous kidney. Do not rest a diagnosis of renal tuberculosis upon the sign alone.—Urolog. and Cut. Jour.

In catheterizing a tabetic bladder, be as surgically clean and careful as you would be in a major operation. Infection follows so easily.

JANUARY 16, 1920

It is the BIRTHDAY of a New Year of hope, aspiration and achievement.

It is the EMANCIPATION DAY for the enslaved victims of drink.

It is EASTER DAY, the day of resurrection to a new manhood and womanhood for America.

It is the new INDEPENDENCE DAY, the day America declared herself free from the domination of King Alcohol.

It is the LABOR DAY which marks the beginning of honest toil for the brewer, the distiller and the dispenser of poisonous drink.

It is ARMISTICE DAY only. The war is not over. Peace day is yet ahead.

It is THANKSGIVING DAY for our na-

It is THANKSGIVING DAY for our nation, for our commerce, for our industries, for our politicians, for our courts, for millions of husbands and wives, parents and children, and for the church.

It is CHRISTMAS DAY, the day of glad tidings to all the world.

It is ALL OF THESE and more. It is the day we set our faces toward new tasks. It is the day of our response to the Macedonian call, with an unselfish devotion to world-wide good. It is the day of our opportunity.



VENEREAL DISEASE

The measures taken in the campaign against venereal disease in the Third Division of the U.S. Army in the first four months of their occupation of Germany are described by D. M. Davis, Baltimore (Journal A. M. A., Jan. 24, 1920). He reproduces a memorandum issued by him during the passage through Luxembourg, calling attention to the importance of the subject after reaching Germany. Each division solved its own problem, and the proposed program was as applicable in Germany as in France, with modifications called for by conditions in the occupied area. The headquarters were established at Andernach-am-Rhein, and the area coincided almost exactly with that of the Kreis Mayen. There are two moderate sized towns in the district and the population is about half agricultural and half industrial. The soldiers were billeted in the German houses, and, therefore, were into close and at times almost intimate, relations with the population. From the German officials it was learned there were no registered prostitutes or houses of prostitution in the district, but the city of Coblenz was from 15 to 25 kilometers away with good railway connections. From German sources it was learned that venereal diseases had become more common since the first two years of war, but the type of case to be combated was entirely clandestine. For nearly four weeks no cases of infection were reported—then a few appeared. The German authorities showed no inclination to cooperate. In Andernach the burgomaster had to be tried and punished for not doing his duty. The hospital space was limited, but finally the German hospital at Niedermendig was evacuated to accommodate these cases, and then the confinement and treatment of the apprehended women was carried out by a local physician under general American supervision. It was found possible to apprehend over 50 per cent of the carriers of infection. In gonorrhea three successive negative examinations were the criterion of noninfectiousness. In syphilis, patients were kept until a thorough course of neoarsphenamin treatment could be completed, and it was the custom to parole the women, declared noninfectious, if they showed an inclination to mend The Germans were indifferent, and their ways. even hostile, to the program, and were indignant that these women were treated in the best hospitals, and that the regular hospital diet and treatment were insisted on. Infected soldiers were tried by court martial, according to army regulations, and confinement sentences had to be carried out after hospital treatment. It was found that the problem was most successfully handled when every avenue of attack was utilized. A table is given of the results from Dec. 16, 1918, to April 1, 1919, showing a gradual decrease in the number of new cases to a very low figure.

ARMY VENEREAL RECORD

The low rate of incidence in venereal disease in the American Army in France and the reason for it are discussed in a paper by P. M. Ashburn, Washington, D. C. (Journal A. M. A., Dec. 13, 1919). It was considered that it was probably much lower than in the other armies in the same field, or even than in the previous records of the U. S. Army. The corresponding incidence rate in the United States was always reported as higher than in France. It is

thought that this was an error, as there is no sufficient reason to account for a higher rate in the United States. Near their homes the men were less liable to temptation and more subject to public opinion, had less discomfort and hardship. Temptations were greater and alcohol cheaper and more easily obtained in France-all of which speak against the probality of a lower rate abroad. An effort was made, therefore, to obtain information that would account for the low rate reported, and answer certain questions that arise, such as the percentage of chaste men among soldiers, the average number of nonprotected venereal contacts to each venereal case, and what proportion of men have been exposed without prophylactic protection. Direct inquiries to the men were more or less completely answered by 13,648 soldiers in base sections, principally at Bordeaux, St. Nazaire, Brest and Tours. From the direct answers and compilations received by Ashburn in reply he concludes that antivenereal measures are effective in the following order: 1. Those that keep men chaste. 2. Those that diminish opportunity for sexual contact. 3. Those that diminish the dangers of contact, especially venereal prophylaxis. 4. Those that exact punishment. Thirty-four per cent of the 13,648 white men, taken at random in the Service of Supply, abstained from sexual intercourse while in France, and the most important factors in this were inherent in the men rather than in the antivenereal campaign-factors such as character, religion, love, loyalty and self respect. Another third indulged so infrequently as to render their chances of disease quite small. The stand of the commanding officer in regard to this question, and his following by his subordinates, from generals down, almost deserves the name of public opinion in its effects on the conduct of the men. The influence of work, play and amusements supplied by the Red Cross, Y. M. C. A., Knights of Columbus, etc., was also a valuable factor. It is self-evident that not nearly all exposures are followed by disease, the ratio being about 1:30, as estimated by Ashburn from his investigation. Prophylaxis, as practiced, increased this figure; about half of all venereal cases followed neglect of this prophylaxis. One fact that stands out prominently from all angles of approach is that increased opportunities increase disease, and this is one of the strongest arguments against licensed prostitution. The ratio in the fighting armies was, for several months, only one-third to one-half as high as in the Service of Supply, and as they moved in Luxemburg or Germany or went out on leave and mingled more with the population, the difference was not so great. The bad effects of granting leave, in this regard, are especially noticed. Isolation of infected men and enforcement of orders gave generally good results. Some doubts were based on the fact that inspections were easily imperfect and infrequent, and for this reason examinations of women should not be relied on too implicitly. It is difficult to state in what degree prophylaxis was effective, but in France, Ashburn received the impression that it was less so against chancroids than against gonorrhea and syphilis. Individual punishments were effective and justifiable, but collective ones, such as stopping of passes, etc., while effective in influencing public opinion and reducing the number of cases, have been considered unjust and were, therefore, discontinued. The knowledge of the punishment that would follow wilful infection was a less potent factor than some others, because most sinners do not expect to be caught, and a large number of illicit contacts are casual and the circumstances are such as lead to neglect of prudent counsels and "safety first." Fixed principles and character are what can be most depended on.

THE BUCHANAN COUNTY MEDICAL SOCIETY (Organized April 14, 1908)

OFFICERS FOR 1920

PresidentL. J. Dandurant Second Vice-PresidentT. M. Paul SecretaryO. C. Gebhart TreasurerJ. M. Bell Censors—J. I. Byrne, 1920; P. I. Leonard, 1921; F. H. Ladd, 1920-1921-1922. Delegates—F. H. Spencer, 1920-1921; Daniel Morton, 1920-1921. Alternates-A. E. Burgher, 1920-1921; W. M. Minton, 1920-1921.

Meetings held first and third Wednesdays, 8 p. m., in Commerce Club rooms.

Council-O. C. Gebhart, expires 1920.

COMMITTEES FOR 1920

Executive—W. T. Elam, C. H. Wallace, A. B. McGlothlan.

Public Health and Legislation—C. R. Woodson, Daniel Morton, P. I. Leonard.

Program-H. W. Carle, F. H. Ladd, A. L. Gray. Library-H. K. Wallace, H. J. Ravold, E. S. Ballard. Medical Service—W. H. Minton, 1920; H. W. Carle, 1920-1921; T. M. Paul, 1920-1921-1922.

Membership-F. H. Spencer, C. A. Good, Jno. Doyle. Tuberculosis-O. C. Gebhart, J. I. Byrne, Thos. Redmond.

Economics-Caryl Potter, W. J. McGill, H. S.

Good Milk-E. S. Ballard, O. C. Gebhart, J. F. Owens.

Regular meeting of the Society held at the Commerce Club rooms, January 21, 1920. Thirty-four members present, Dr. L. J. Dandurant in the chair. The minutes of the previous meeting were read and approved, after which the president announced his appointment of committees to serve for the ensuing year. (See committees above.)

On motion the president was instructed to take out a membership in the "Commerce Club" in the name of the Society. The treasurer's report was read and referred to the executive committee. executive committee recommended that the contract with the Medical Herald be renewed.

On motion of Dr. Morton, seconded by Dr. Woodson, a warrant was ordered drawn on the treasurer to renew the subscription for Medical Journals with the City Library, to the amount of \$87.45.

The following bills were read and a warrant drawn on the treasurer to pay same:

Lon. Hardman, \$3.65; Secretary, \$1.50; Multi Letter Company, \$1.35; News Corporation, \$2.50.

House Bill No. 5123, which is now before Congress was read and unanimously endorsed. This bill was intended to prevent transmission through the mail of advertising relating to the treatment of venereal and sexual diseases.

Dr. O. C. Gebhart was nominated and unanimously clected to serve as secretary for the ensuing year. He was instructed to publish in the next issue of the Bulletin the resolution adopted on April 2, 1919, which reads as follows:

"Resolved-That any member of the Buchanan County Medical Society who operates in the Osteopathic Hospital or Savannah Sanitorium or consults with Osteopaths or any Unetheal Cult be dropped from the roll of membership.

The following resolution by Dr. Minton, seconded by Dr. Schmidt, was adopted:

"Resolved—That this Society endorse the Venereal Clinic; amended by Dr. Potter, to read as follows: "The Society approves of the Venereal Clinic provided the committee for the management of same be composed of 3 members of the Red Cross Committee, 3 members of the City Board of Health, 1 member of the Buchanan County Medical Society; seven in all."

This motion prevailed and the Society thereupon elected Dr. J. F. Owens as their member of the com-

Considerable discussion took place regarding the advisability of discontinuing quarantine of smallpox cases and commended the Board of Health and the

School Board for their action in excluding from school children and adults who had not been vaccinated for five years, and commended that the vaccination requirements be made more rigid.

There being no further business for the Society, the meeting adjourned. W. F. Goetze, Secy.

STANDARDIZATION OF LABORATORY TESTS

So long as laboratory tests employed by practitioners of medicine are simple, there is little opportunity for confusion in their interpretation. However, errors of interpretation are likely to occur in the use of complex reactions or when uniform standards are not adopted. Several years ago the writer of a paper on scabies asserted that all persons with scabies had albuminuria; subsequent investigation showed that the test for albumin which was used was so delicate that it showed the presence of albumin even in normal urines. Many of the modern laboratory tests, such as the Widal and Wassermann reactions, are extremely complicated. The technic of these tests has been gradually modified by different observers so that now many systems of performing the tests are in use. In a recent article by Kolmer and Flick, (Am. J. Syphilis 3: 541, 1919) eight different methods of performing the Wassermann test are compared, and it is demonstrated that each gives different results. The same thing is true of the Widal reactions, as has been pointed out by Dreyer. Obviously, it is desirable that every one who discusses the results of the Widal reaction or of the Wassermann reaction should refer to the same thing. When this is not the case, the figures regarding the validity of a given test presented by different observers are not comparable, and confusion rather than enlightenment results. The time has rather than enlightenment results. come when these tests should be standardized throughout the world. Such standardization need not exclude further experimentation on any of the tests in question, and provision should be made for the reconsideration of the standards at stated intervals. As a step in this direction the U.S. Pharmacopeia already has a section on Diagnostic Reagents and Clinical Tests which, thus far however, is chiefly concerned with the strength and purity of reagents. The United States government maintains a Bureau of Standards, and it is possible that through this organization or some similar one the important work of standardizing laboratory tests can be accomplished. In any event, the work needs to be done.-Jour. A. M. A., Dec. 6, 1919.

DROPSY

Indications:

Dropsy of any origin,

Bright's Disease,

Valvular

Diseases,

Heart Trouble

following Influ-

enza, Cirrhosis,

Anasarca.

This is an advertisement of our sole product, into which we put all our efforts to produce as nearly a perfect remedy as possible, for just two of the many ailments of humanity which you are called upon to treat.

DROPSY AND HEART DISEASE

ANEDEMIN doesn't always relieve even these, but it will give you a better result in a greater number of cases than any other remedy, and do it without danger to your patient and with no bad after-effects It has no cumulative action and produces no stomach disturbance; is a powerful diuretic without irritating.

Sample, literature with formula to physicians.

ANEDEMIN CHEMICAL COMPANY, Chattanooga, Tenn., U. S. A.

Anedemin Chemical
Company, Inc.
Chattanooga, Tenn.
Send sample and booklet.

Name	eM. D.
City	
State	

Notes on Reliable Remedies

Important Reprint—Armour and Company, Chicago, will be pleased to send a reprint of Frederic Fenger's article "On the Seasonal Variation of the Iodin Content in the Iodin Gland" to any physician who will ask for it. This paper records work covering more than twelve months, which work was done in the Research Laboratory in Organotherapeutics of Armour and Company.

"Combat the Flu with lodine" is the very timely suggestion offered by the Iodum-Miller Co., in an effective announcement appearing in the medical press. Keep the nostrils and upper air passages aseptic by the daily use of Iod-izd-oil (Miller) and you will prevent the infection; while the administration of Iod-izd-carbon (Miller) will asepticize the entire intestinal tract, an important point fully recognized now by the best clinicians. Be prepared for your "flu" cases by ordering a supply of these preparations at once. See announcement on advertising page 59 of this issue.

Valesco-Creosote Administration—The profession has long recognized that creosote should be classed among the "essential drugs." But creosote, because of its acrid taste and irritating effects, has created for itself antagonisms and has been used only under compulsion. For many years indifferently successful efforts have been made to get creosote in a form in which it could be administered without irritation and without creating repugnance. This has at last

been accomplished with real success and Valesco is the result. With Valesco it is possible to get creosote saturation, a condition most desirable in the more acute and the more severe pulmonary affections. Valesco makes possible a demonstration of the real worth of creosote. In the hands of dependable clinicians Valesco is doing a work in tuberculosis remarkable. It has been developed that in these cases saturation should be established and maintained for considerable periods. In pneumonia and influenza Valesco is producing equally happy results. Here quick saturation is desirable and should be maintained until the disease is under control. No physician can afford to fail to avail himself of this new and important agent. The Valesco manufacturers invite correspondence and promise co-operation. Write them.

An Unusual Booklet—A new and very attractive pocket booklet on "Influenza, Colds and Catarrh," has recently come to our notice. It presents in concise, readable form some interesting facts regarding the history and etiology of the disease, with hints as to dosage, etc. This booklet may be read with profit by every physician and druggist in the country. Typographically, it is exceptionally good, and the illustrations are interesting. Copies may be obtained free of charge by writing to H. K. Mulford Company, Philadelphia, Pa.

"I prescribe Tongaline very frequently as a remedy for excess of uric acid, which is often the cause of rheumatism, and it is my sheet anchor for that condition. I also find tongaline very beneficial in muscular pains due to a sluggish liver and inactive bowels. When a patient comes to me complaining of soreness all over, I place him upon tongaline, and it has never disappointed me."

Two Interesting Letters

The Dionol Company. -, Ill., Sept. 30th, 1919. If you are so cock sure about the potency of Dionol Treatment, I suggest that you may send me 11/2 dozen Dionol preparations assorted, but let me tell you that the price will not be sent to you until I have tried it to my entire satisfaction. (Signed) -HOW DIONOL MADE GOOD -, Ill., Nov. 18th, 1919. I have used both Dionol preparations you sent me in varieties of cases with excellent results, and I consider that Dionol is all that you claim and more. It is remarkable in reducing pain, fever and inflammation in a hurry. I am entirely satisfied with its use and results, and I will not be without it in the future. I am enclosing herewith a money order for \$10.90 for the last consignment of Dionol with the request to please send one dozen more of Emulsified and half a dozen Ointment Dionol, through -Druggist, and oblige. DIONOL is the "something different" that secures results, unobtainable by usual meth-DIONOL is effective in subduing local inflammation whether the latter exists locally or as a part of some general disease. The acid test of Promise is Performance. TRY DIONOL. Send for literature, Case Reports, etc.

The Dionol Co. Dept. 27

864 Woodward Ave., Detroit, Michigan.

The Prophylaxis of Industrial Infection—While "Safety-First" has obviated the occurrence of many preventable industrial accidents, the incidence of infection following injuries in shops, mills, factories, offices and stores is still one of the greatest problems with which the physician has to contend. Industrial first-aid and surgery make many special demands on the physician. Of these demands, that for an efficient, non-toxic and cleanly antiseptic is one of the most constant. The physician using Dioxogen has no trouble in this direction, for he has learned to appreciate its unique advantages as a thoroughly reliable antiseptic in the routine prophylaxis of industrial infection. Extended experience in practical, every-day surgery has concilusively demonstrated that Dioxogen is peculiarly adapted for efficiently cleansing infected wounds, or dressing fresh cuts or abrasions. No other antiseptic is so prompt in its control of suppuration, so gratifying in its promotion of tissue repair, or so satisfactory for all-round use. A supply of Dioxogen in the workshop clinic, and a bottle in the first-aid chest or surgical grip, gives the industrial physician and surgeon the comforting assurance that he is prepared to meet any demand for antiseptic treatment and prophylaxis. In purchasing a peroxide of hydrogen it is essential to make sure that it is free from adulteration and irritating qualities. It must also be of constant, unvarying character as well as high germicidal potency. By definitely specifying Dioxogen and insisting on its use medical men will protect themselves and the best interests of their patients.

A Suggestion for the Use of Thialion—The prevailing epidemic of influenza and pneumonia will no doubt serve to draw attention more and more to the importance of acidemia or acidosis in such diseases. The statement has been made by excellent

authority that pneumonia patients really die from acidosis. A reduction of the normal alkalinity of the blood always favors pathological changes. It is coming to be recognized that diminished alkalinity of the blood is brought about by several different factors operating, among which is the retention of acid products of tissue or food katabolism. This suggests therefore, not only the administration of proper alkaline agents, but also of mild eliminants; such a combination for example, as is supplied in the form of Thialion. This is not by any means a new or untried product, having been on the market for a number of years and given most satisfactory results in the treatment of what used to be called uric acid manifestations. Thialion is pleasant to take, efficient in action, satisfactory in results. A sample and literature may be obtained by writing to The Vass Chemical Company, Danbury, Conn.

The Nervous Irritability of Women-Women frequently consult the physician complaining of extreme nervous irritability, this interfering with their sleep and the management of their households. nervous systems are in a constant state of hypersusceptibility to unusual or even ordinary influences. In the treatment of these patients the utmost care in the choice of remedial agents must be taken so that a condition worse than the original is not substituted. Pasadyne (Daniel) is a most excellent sedative and of marked suitability for these cases. It produces definite sedation, reduces nervous irritability and gives the patient much needed sleep. No harmful effects attend its use and habit formation need not be feared. Pasadyne (Daniel) is merely a concentrated tincture of passiflora incarnata. Use it when a sedative is indicated. A sample bottle may be had by addressing the laboratory of John B. Daniel, Inc., Atlanta, Ga.

Revised Edition

Now Ready

Formulas for Infant Feeding

BASED UPON

The Mellin's Food Method Milk Modification

Physicians may obtain a copy of this book upon request

Mellin's Food Company,

Boston, Mass.

Renewing Our Acquaintance—There are, no doubt, many physicians who have been in practice for years who can recall having used, with a great deal of benefit, two preparations formerly marketed by the Crittendon Company of New York, viz: "Hydroleine" and "Colden's Liquid Beer rome. The superintering of medicinal preparations as it is true of inand "Colden's Liquid Beef Tonic." It is apt to be dividuals that "out of sight is out of mind." absolutely unnecessary to more than refer to the recognized and accepted value of cod liver oil as a therapeutic agent. Unfortunately however, preparations of cod liver oil are, as a rule, divisable into two classes: those in which an attempt has been made to make the product so palatable that the oil has been so changed as to lose in therapeutic value, or, on the other hand, where a good quality of oil is used, the preparation has been unpalatable or unpleasing and therefore soon became objectionable to the patient. Neither of these objections applies to Hydroleine, which is probably the most pleasant and palatable form of cod liver oil that is obtainable. The patients will not object to its use and the beneficial results that follow it will soon convince the doctor of its therapeutic value. In Colden's Liquid Beef Tonic, there is afforded a means by which the careful physician can stimulate the digestive processes, increase the production of digestive juices and thus put his patient in better shape than can be done either by the administration of enzyms on the one hand, or of merely nutrient beef products on the other. How this preparation acts is described in an interesting booklet under the title of "The Colden Way" which will be sent to any physician together, with samples of the product on request to the Century National Chemical Company, 86 Warren St., New York City.

Dr. Copeland, health commissioner of the City of New York, says, "Various diseases of the nervous

system, eye, nose and throat follow influenza." Dr. Royer, health commissioner of Pennsylvania, adds tuberculous conditions are also prone to occur. A check on such conditions is simply, raise resisting power. The following may be used as an example: E. R. influenza; pneumonia. Father died of tuberculosis. On the 14th day the temperature was 100 F., cough very distressing and sputum bloody, was very weak. Comp. Phos. Tonic (Dowd) was ordered, 30 drops in milk 30 minutes after nourishment, t i d. In three days temp. normal, cough 50 per cent less, no blood; gained eight pounds in two weeks; there was perfect recovery. Probably the homeopathic profession are right in claiming phosphorus is a specific in disease of the lungs.

Removing Suspicion-No matter how efficient a person or thing is, it always proves a handicap if there exists the least doubt or suspicion as to the safety of the work performed. Digitalis is a very good example of this. The therapeutic value of digitalis is beyond question. Unfortunately however, there are several drawbacks that accompany its use. It is often difficult to get a dependable preparation. There are, sometimes, cumulative action and effects which lead to very unpleasant symptoms. A certain proportion of patients cannot take digitalis in sufficient dosage for a sufficient length of time to have it prove entirely beneficial. It has of course, in addition to its action and effect upon the heart, a certain amount of diuretic action, but this again, is more or less uncertain. The older school of physicians recognized the diuretic effects of squill, they realizing that it often irritated both stomach and kidneys, its use never became popular. Laboratory research has resulted in the discovery that there are several active principles in squill, some of which exert a marked deleterious action upon the body, while others are without any unpleasant or dangerous features. Two of the active principles of squill, scillitoxin and scillipicridin strengthen the heart's action, prolong systole and are without cumulative effects as well as acting as marked diuretics. The combination therefore, of these two active principles together with oxydendron and sambucus supplies to the physician a therapeutic agent which is most valuable and at the same time, entirely safe. Such a combination has been before the medical profession for a number of years under the name of Anasarcin tablets and all physicians who are not familiar with the great value of this preparation should send for interesting literature and samples sufficient for clinical trial, to the Anasarcin Chemical Company, Winchester, Tenn.

A New Booklet-For many years it was comparatively easy for the laity to purchase narcotics. This produced many habitues of opium and its alkaloids and likewise cocaine. Very drastic legislation became necessary to curb this evil. One result of this is that physicians, who have always been very scrupulous in their use of narcotics, often find it quite inconvenient to prescribe what they regard as legitimate and entirely necessary amounts of nar-cotic drugs, particularly opiates. Physicians, however, are coming to realize that opiates are more or less dispensable in many conditions where they have heretofore been considered necessary. Thev have been casting about for the most suitable substitutes that could be prescribed without restriction by law, that would not tend to habit formation. In

this connection it is gratifying to note the cooperation offered by Eli Lilly & Company in the way of a vest pocket reference entitled "Standard Anodynes. Sedatives and Hypnotics." In this edition there are more than ninety items mentioned which are non-narcotic, but which may be employed for anodyne, sedative or hypnotic effects. Others are listed which contain small amounts of opiates, but require a federal record of sale only. This booklet should prove very helpful to physicians generally, since it not only mentions products, but gives brief descriptions of therapeutic application and dosage. Physicians will profit by requesting copies of this booklet from Eli Lilly & Company, Indianapolis.

Advantages of Bromidia-The advantages of Bromidia (Battle) over extemporaneously prepared bromide mixtures lie in the purity of the drugs entering into its composition, the exactness with which it is compounded and the even balance of its formula. These features give it a decided therapeutic advantage over hastily prepared bromide mixtures, and reduce the possibility of untoward effects, quite likely to happen with the use of extemporaneously prepared mixtures. For many years Bromidia (Battle) has been the favorite sedative with thousands of careful and exacting clinicians. This continued use is evidence of its high value. In sleeplessness or excessive nervous irritability bromidia (Battle) is productive of the desired results. A further advantage is that it may be continued over long periods.



A CLINICAL LABORATORY

THAT RENDERS A REAL SERVICE

The BEEBE LABORATORIES, Inc.,

have opened a well equipped Clinical Laboratory in the Argyle Bldg., KANSAS CITY, MO.

Your inquiries will receive prompt, personal attention.

Specimens reported the day received.

BEEBE LABORATORIES, Inc.

ARGYLE BLDG., KANSAS CITY, MO.

Side Lights on Cascara—Physicians frequently refer to Parke, Davis & Company as the cascara house—for it was this Company which introduced Cascara Sagrada forty-three years ago. Cascara was unknown to the medical profession until Parke, Davis & Company—with the assistance of prominent physicians, chemists, botanists and pharmacologists -studied the drug and definitely established it as a therapeutic agent. Cascara immediatelly sprang into popularity with physicians. It became a subject of discussion in medical meetings—not only in this country, but on the other side of the Atlantic. was directed to the attention of the British Medical Association at a convention in Cork, Ireland, as early as 1879. It wasn't long before cascara was being prescribed by medical men all over the world. Today the drug is recognized by every pharmacopoeia except the Finnish and Portuguese. It has come to be looked upon as an essential in medical practice. Fluid Extract of Cascara (P. D. & Co.) is an ideal product. It contains all of the tonic-laxative constituents of two-year old bark of Rhamnus The dose is about Purshiana, the true cascara. one-half that of ordinary fluid extracts of cascara. Cascara Evacuant, another notable cascara product, is a palatable preparation of two-year old bark of Rhamnus Purshiana. Cascara Evacuant is about twice as active as the ordinary "aromatic" cascara.

Do not forget a common site for a gonorrheal metastasis is in the tendon sheaths of the dorsum of the foot. The joints may not be affected at all.

It has not yet been proven that any of the newer agents are superior to potassium permanganate as an irrigation in gonorrhea. Stick to it until some thing better is found.

An Old Truism-There is an old saying to the effect that, "Good wine needs no bush" and the same might be applied with equal truth to certain medicinal or therapeutic products which have been in constant use by a large number of the medical profession for a period covering many years. Time tested and trial proven porducts require very little advertising except of a sort to remind the busy doctor of them. This applies particularly to Micajah's Wafers and Micajah's Suppositories, both of which were brought to the attention of physicians a number of years ago and the use of which is steadily and constantly increasing. Both of these products will be found to be of great value in the treatment of conditions for which they are intended. They are ethically advertised and the claims made for them are kept well within conservative bounds. The physician who has used either or both of these products, needs to be told nothing regarding their practical value. The physician who has not used them, would do well to get acquainted with them because by their use, he will be able to secure better results for his patients as well as for himself. Samples and literature of the Wafers and Suppositories will be sent promptly on request to Micajah & Co., Warren, Pa.

EXIT THE FAMILY DOCTOR

"Who is your family doctor?"

"I can't tell you."

"Why not? Don't you know his name?"

"Yes. Dr. Johnson used to be our family doctor, but nowadays mother goes to an eye specialist; father to a stomach specialist; my sister goes to a throat specialist; my brother is in the care of a lung specialist, and I'm taking treatments from an osteopath."—Detroit Free Press.

A NNOUNCING:

The opening of a new branch at

718 FELIX ST. (Second Floor) ST. JOSEPH, MO.

Fully equipped to give individual attention to your prescriptions and surgical instrument orders.

MERRY OPTICAL COMPANY

KANSAS CITY, MO.

ANNOUNCEMENTS

Drs. W. J. Frick and R. D. Irland announce their association as partners, suite 925 Rialto Building, Kansas City, Mo.

Dr. C. Wilbur Mercer has opened offices at 310 Rialto Building, Kansas City. Practice limited to orthopedic surgery.

Dr. Oliver C. Gebhart was elected secretary of the Buchanan County Medical Society at its last meeting in St. Joseph.

Dr. John P. Lord has been appointed chairman of the arrangement committee, Medical Society of the Missouri Valley, September meeting in Omaha.

Dr. Frank Parsons Norbury, of Jacksonville, Ill., has been appointed consultant in neuropsychiatry for the Eighth District, U. S. P. H. Service, by Surgeon General Blue. The Eighth District comprises the states of Illinois, Wisconsin and Michigan.

Dr. Carl E. Black, of Jacksonville, Ill., was the principal speaker at the annual dinner of the Western Surgical Association in Kansas City. His subject was "Medical Education and Practice in Greece," illustrated by 125 slides, showing the work done by the medical department of the University of Athens.

Colonel H. A. Metz, president of the H. A. Metz Laboratories, Inc., has donated the necessary funds to the Vounteer Hospital, of New York, for the installation and development of a urological and syphilogical department, both in the hospital and its dispensary. It is the hope of Colonel Metz that the department will not only be able to do the usual ambulatorium and beside work of such a subdivision, but that it will also engage in research work which may lead to preventive measures and to treatment, to lessen the evils of syphilis for the betterment of the race. This donation by Colonel Metz is in keeping with his action in developing a large scientific organization in his laboratories in Brooklyn.

For Goitre—Doctor, you should try the special goitre tablets put up by the Columbus Pharmacal Co., Columbus, O. One trial will convince you. See announcement in this issue.

Tires for the Doctor's Car—If you do not know the efficiency of the "Brunswick Tire Service," and the qualities of "Brunswick" tires, consult Harry Lewis, 22d and Grand Avenue, Kansas City, and you will ride "ever happy thereafter."

Golden Opportunities

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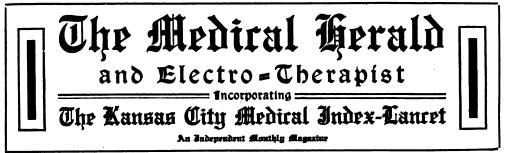
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Vol. XXXIX.

MARCH 15, 1920

No. 3



DIAGNOSTIC ADVANTAGES SOME SPINAL FLUID ANALYSIS*

H. J. LEHNHOFF, M. D., Lincoln, Neb.

Making a spinal puncture and analyzing the fluid recovered is not necessarily the business of a specialist. In a general practice the necessity of carrying out such a procedure is somewhat uncommon and therefore somewhat difficult merely because of lack of practice and experience. In analyzing the fluid, special apparatus and special technique are necessary in making special tests, to be sure. However, the more important facts can be determined by practically any observing physician, and if special tests are necessary, the fluid can be sent to laboratories which are specially equipped to make these tests.

Permit me to say a word in regard to the technique of making the puncture.

Location—The space between the fourth and fifth lumbar vertebrae is usually selected for making the puncture. If it is made a vertebra higher or lower, no harm is done. One reason why the lumbar region is selected is simply because we wish to avoid the spinal cord. The latter terminates at the first lumbar; consequently there is no danger of injury to the cord if the puncture is made below the second lumbar. A good practical rule is to have in mind an imaginary line drawn straight across the spine from crest to crest of the ilia. The intervertebral space nearest this line is a favorable space to

Sterilization—Sterilization of the skin with iodine is sufficient.

Local Anaesthesia—There is an advantage in injecting a little cocaine or novococaine in the area selected for puncture. The injection should be made deep as well as superficial. This will not relieve the pain of the needle passing between the vertebrae. However, the local anaes-

*Read before the Medical Society of the Missouri Valley at Omaha, Neb., Sept., 1918.

thesia is usually appreciated by both physician and patient, particularly if several attempts are necessary before the membranes are pierced.

The position of the patient is a matter of preference. If the patient is an adult and in good strength, I prefer to have him in a sitting position, leaning well forward. The "tailor" position is good. In a child or adult too ill to hold the spine in the position desired, the lateral recumbent position is preferable. If an adult is in the lateral prone position, he is advised to bring the knees well up toward the chin and to grasp the knees in the forearms. As can readily be seen, the object of this position is to obtain the greatest posterior convexity of the lumbar spine; that is, to obtain as much intervertebral space as possible.

Needles—The needle employed should be from three and one-half to five inches long and a little larger than a common knitting needle. They should not be absolutely stiff. If they are too large in diameter, more pain is experienced when it passes between the vertebrae. In children, a shorter and thinner needle is preferable.

Relation to Spine and Direction—The needle enters the skin on a horizontal line between the spinous processes, which can be felt, and about one-half inch to either side of the perpendicular line of the spinous processes. It is carried in on almost a horizontal plane, the point being a little cephalad, and inward toward the base of the spinous processes. In an adult the point of the needle goes in a distance of two to four inches as a rule. Several attempts at passing the needle are often necessary before any fluid is recovered, and occasionally it is impossible to recover any fluid at all.

The needle should not be handled with the naked hand or fingers. Contamination of the fluid is apt to result. A piece of sterile gauze should be grasped so as to protect the needle from the fingers.

Collection of Fluid—The fluid should be allowed to drop into a sterile test tube. It is also an advantage to have the tube perfectly dry. A moist tube, particularly if moist with undistilled water, will mar some of the finer tests for syphilis. At the time of collection it is well to note the rate of flow of fluid. The number of drops per minute can be recorded. Normally the number is about forty to sixty.

Analysis of Fluid—This is the point at which some of us hesitate. Let me repeat that the special tests are not the most important. The color, cell count, and character of the cells are more important than making the special tests for syphilis. The former can be made by anyone who has had an average experience in the use of a microscope. The examination of a stained specimen for bacteria is also within the scope of practically all of us.

Color—Normal spinal fluid is absolutely clear. The converse is not true. All clear fluids are not normal. A fluid that is cloudy or floculent signifies abnormality and always means disease of the central nervous system. finding alone is of the greatest importance. If one is in doubt as regards a diagnosis and recovers a spinal fluid that is cloudy or floculent, the location of the disease is immediately determined: Cloudiness usually signifies involvement of the meninges, and is found more often in acute than in chronic conditions. If the color is yellow or approaches a reddish hue, a tumor pressing upon the cord must be concluded in the great majority of cases. This statement precludes trauma with acute hemorrhage.

The Cell Content—The spinal fluid is diluted to a known per cent and placed on a common blood-counting apparatus and the cells counted. The number of cells in a normal spinal fluid is from six to twelve per c. m. If the number is above twelve, the disease is again located in the central nervous system. If the cell count is above normal, but not particularly high, sav

below 100 per c.m., one is led to think of chronic diseases rather than acute. Among these chronic diseases, syphilis is markedly pre-eminent. If the cell count is particularly high, say 200 or 300 or even 1,000 per c.m., acute conditions are brought into the foreground. In this class meningitis, either tubercular or non-tubercular, is pre-eminent.

The character of the cells can be noted to a certain extent in the cou ting chamber. It is more convenient to place a drop or two of the fluid on a microscopial side and cover with a cover glass. One specimen so prepared can be examined without staining and a second can be stained. If the cells are lymphocytes, we are led to think of chronic conditions, part cularly syphilis. If the cells are polynuclear we are led to think of purulent infection, particularly acute cerebrospinal meningitis. If red blood cells are present, we must think of new growth

In the stained specimen bacteria may be observed. The pneumococcus is demonstrable. An intracellular organism signifies infection by the specific meningococcus intracellulares. In tubercular meningitis the tubercle bacillus can with difficulty be demonstrated. The diagnosis is fixed when such is the case. If non-tulercular bacteria are found at all, it is strong evidence against tubercular or syphilitic infection.

The protein test, the Noguchi test, the gold chloride test and the Wassermann reaction are, with the exception of the first, all tests for syphilis. They can be done only in laboratories which are specially equipped in both apparatus and re-agents, and can be executed only by those having more or less experience in this line of work. However, these are of the least importance. Much more important diagnostic fac-

Disease	Pressure	Color	No. of Cells	Character of Cells	Bacteria	Culture. Growth or no Growth	Special Tests
Cerebro-Spinal Meningitis Acute	Plus	Cloudy	Plus	Polymorph	Plus	Plus	0
Tubercular Menin- gitis	Usually plus	Clear	Plus	Lympho- cytes	Plus	0	О
Anterior Poliomye- litis	Occasional- ly plus	Clear	Plus	Lympho- cytes	0	0	0
Cerebro-Spinal Syph- ilis	Plus	Clear	Plus	Lympho- cytes	0	О	Plus
Tumor of Cord	Plus or Normal	Yellow	Plus	Lympho- cytes	О	О	Globulin or Plus
Tumor of Brain	Plus or Normal	Clear or Bloody	Usually Normal	Lympho- cytes	О	О	0
Cerebrae Haemor- rhage	Usually Normal	Bloody or Clear	Usually Normal	Red Cells	О	О	0
Uramia	Normal	Normal	Normal	Normal	О	О	O

tors are the following, namely, the pressure under which the spinal fluid comes away, the color of the fluid, the number and character of the cells, the presence of bacteria, and their character. Cultures of the fluid should be made if possible. A growth on media is an aid in making a more specific diagnosis in acute cases. The absence of growth speaks for tuberculosis or syphilis. In cases in which tuberculosis is suspected, animal injection can be made.

Permit me to, report a resume of a few cases in which spinal puncture was an important factor

in making the diagnosis.

On April 2, 1917, I was called to see a boy of eighteen. He had been seen by three other physicians, so the case was a questionable one. There had been an epidemic of scarlet fever in the small town where this boy lived. Scarlet fever had been originally diagnosed, but now was questionable. He had been sick a week, complained of headache, some backache, and the light hurt his eyes. There was a slight eruption on the chest and back. There had been a moderate temperature.

Upon examination I found a temperature of 101; the pulse was in the eighties. The pupils were somewhat contracted. There was perhaps a little stifffness in the neck; however, this seemed to be caused more by pain. There was a slight tendency to Koenig. The boy impressed one as being a little bit below par mentally. The physician in charge told me this condition had always existed. The urine had a small trace of albumin. The white cell count was 41,000, the Widal negative. I rather suspected meningitis, partly from the fact that I had recently come in contact with a number of cases, and did a spinal puncture. In short, the fluid showed 80,000 cells. Cultures from the fluid showed a diplococcus that was intra-cellular. The spinal fluid analysis placed the diagnosis beyond doubt.

On June 7, 1917, a child of two and one-half years was brought to the office. The family history was negative. Personal history: The child was breast-fed, and a normal baby until the present trouble. He had measles at eighteen months.

The present trouble began about three weeks ago, but the child has been somewhat restless all winter, crawling up in the knee-chest position and screaming at night. The last three weeks the restlessness has become more intense. The child would crawl up over the father's shoulder with the legs and thighs flexed. There was some grinding of the teeth and clawing at the nose. The appetite has been poor. There had been no other manifestation of involvement of the gastrointestinal tract. The sleep has been poor, sleeping from fifteen minutes to one hour, then crawls about and cries. The father thinks there has been some loss of weight.

Upon examination the temperature is 100.6

by the rectum, pulse 150. The child looks a little wild-eyed, but becomes interested in some playthings; plays on the floor with the father's watch. The child would cry part of the time, and particularly when an attempt at examination was made. No physical abnormalities whatever were elicited. The urine was negative; white cell count 8,550. A spinal puncture was made; the fluid came away under pressure. There were 240 cells per c. m. m. Of these 34 per cent were polynuclears, 30 per cent large lymphocytes, and 36 per cent small lymphocytes. The Wassermann was negative. A few diplococci were present, but at the first examination we could not determine whether or not these were intracellular. At a subsequent examination, however, they were found to be intracellular.

In this case both the symptoms and the physical findings were exceedingly meager. A restless crying child with a tendency to flex the thighs and legs, with practically no abnormal physical findings, does not admit of a postive diagnosis. However, the spinal fluid analysis gives an absolutely positive picture. The child was given several instraspinous injections of the meningococcus serum and completely recovered.

On September 26th, 1916, an electrician of 34 was sent in for examination. He was a married man. His family history shows two children living and well. The wife has had no miscarriages. One sister died at eighteen of goitre. Personal history: Is a moderate smoker; has never used alcoholics. Previous diseases: No scarlet fever or diphtheria. Had inflammatory rheumatism at fifteen; joints swollen and red. Was in bed three or four weeks. Does not know of any cardiac complications. Had smallpox when 22, "gallstone colic" when 29, three attacks. Denies venereal disease.

On August 31, 1915, he was working in an attic in a stooped position. On two or three occasions he raised up and bumped his back against the structure above. On one occasion he felt something give way. The next morning the back felt sore. He returned to work and remained for four and one-half hours, then his back began to trouble him; he stopped work, and has not worked since. On reaching home he went to bed. The pain in his back continued, there was some headache, and he gradually lost control of the lower extremites until at the end of the fourth day he could not move them at all. In two or three months they began to improve gradually until the present time. He can now move the left extremity somewhat, but cannot move the right at all. Bowels and urine all right. Says he feels no numbness and no peculiar sensations.

Upon examination we find a temperature of 99.2 and pulse of 85. Pupils react normally; heart, lungs and abdomen are negative. The reflexes of the arm and forearm react normally.

The abdominal does not react; the cremaster reacts; the patellars and achilles do not react; the plantars react. There is no clonus and no Babinsky. There is a marked paralysis of both lower extremities, especially the right, which is almost without motor function. There is some function in the left. Sensation is normal. There is some atrophy of the muscles of the lower extremities. The muscles are flaccid. The urine is normal; blood Wassermann negative. A spinal puncture was made. The fluid demonstrated white cells 27 per c.m.m., 100 per cent lymphocytes. The Wassermann was negative. Noguchi positive, Fahlings test positive. From the fact that there was an increase in cells all of which were lymphocytes, and from the fact that there was a decidedly positive Noguchi, we concluded there was an old infection of the cord. From the peculiar onset of the disease, its course, and the physical findings, together with the spinal-fluid findings, we made a diagnosis of anterior poliomyelitis. The trauma had nothing to do with the lesion.

A city fireman who is seeking a pension from the city was sent in for examination. He is 26 years old and a married man. His family history is negative. Other than the common infectious diseases of childhood he denies all previous diseases, including venereal.

On January 8, 1916, he was taking the cork from the foot of one of the fire horses when he was shoved backward by the horse. His heel caught and he fell backward, striking the lower part of his back on a brick floor. He became faint. Water was thrown in his face and he was carried to a chair in the engine house. He stated that he "seemed paralyzed all over." He tried to walk, but could not; partly on account of pain in his back. He was partially carried eight blocks to his home by two firemen, who placed their arms under his shoulders, the patient partly sustaining himself by the lower extremities. The next morning he was carried back. That evening he could not eat supper and was somewhat nauseated, but did not vomit. He had no difficulty with urine or bowels. The second day he was taken home from the fire barn in an auto and went to bed, where he remained about four weeks. He was then up and down for one week, when he attempted to go back to work against the advice of his physician. Remained at work one week, when the pain in his hip became so bad that he left the fire barn. The pain was mostly in the left hip, but also sometimes in the right. On some occasions, when going up steps, the left lower extremity would give way and he would fall, after which he would be sore in the hip and thigh. For the last three weeks he has had so much pain that he could hardly walk. The jar of the street car causes pain. He speaks of "spells"

when the pain comes on rather acutely in the whole limb, and he has headache and a general ill feeling. Following this he can hardly walk for several days. Sneezing or coughing does not bring on pain. He is somewhat constipated, requiring a cathartic daily. He arises twice a night to urinate. His temperature had been taken for ten successive days by another physician. It ranged from 98.6 to 99.2.

On November 26th he started up the stairway when his left leg gave way and he fell two or three steps against the wall. There was pain in the hip next day; he could hardly walk. Is inclined to think he stumbles when walking

more than he did a year ago.

On examination there is a temperature of 99.0, pulse 82. The patient looks a little pale and thin. He walks with a slight limp. The pupillary reflex to light is a little slow. There is some pyorrhoea. A few posterior cervical glands are palpable. There is a large gland in the left axilla. There are glands in both groins, and a suspicion of a small gland in the left epitrochlear space. There is tenderness in the area of the sacroiliac synchondrosis. The hip joint is movable in every direction. The Achilles reflexes are absent, the cremasteric and abdominal are reduced. The Plantar reflex is absent. There is no Babinsky or clonus. The rhomberg phenomenon is present. There is a disturbance of pain sensation over the external lateral surface of the left leg.

On December 8th the patellar and Achilles reflexes could be elicited by reinforcement, but were decidedly reduced. Temperature 98.6. Urine negative. White cell count 7,100. A Wassermann of the blood was negative.

On December 12th the systolic pressure was 120; pupils sluggish to light; rhomberg present. He states that he has some bladder disturbance; that is, he has a sudden desire to urinate, starts to the toilet, and loses a little urine before reaching there.

A spinal puncture was made. The fluid dropped 136 drops a minute. There were 83 cells per c.m.m., 100 per cent being lymphocytes. The Wassermann reaction was negative, the Noguchi slightly positive, Fahlings positive, and the colloidal gold test was negative. No T.b. were found.

From these findings we made a diagnosis of infection of the cord. It was our conclusion that the trauma had very little to do with his difficulty. He lost his case in court.

On February 20, 1917, a single man of 25 who was occupied in the bank was sent us with a primary syphilitic lesion on his lip. The blood Wassermann was positive. Spirochetes were recovered from this lesion. He was given salvarsan and mercury; the salvarsan was given intravenously.

On June 1st he had a generalized convulsion which was followed by several more convulsive seizures. He returned to the office and a spinal puncture was made. The fluid was slightly cloudy. The white cell count was 94, lymphocytes 93 per cent, globulin double positive, Fahlings positive, Wassermann double positive, no T.b., gold chloride unsatisfactory.

It will be noticeed that the cerebrospinal symptoms in this case came on very soon after the initial lesion, namely, in less than four months. This was out of the ordinary. We were somewhat troubled over the question as to whether the cerebrospinal manifestations could possibly have come from some cause other than that of his syphilitic infection. For instance, we had given him salvarsan intravenously, the injection being repeated a number of times—I believe six. As you all know, different arsenic preparations have rather a marked effect on the nervous system. In fact, I myself have had one case in which the second injection of salvarsan, given not intravenously but intermuscularly, produced marked cerebral disturbances. Analysis of the spinal fluid in this case, however, makes the diagnosis absolutely clear.

Noted Surgeon to be M. U. Teacher-When the School of Medicine of the University of Missouri recently obtained the services of Dr. James Stowers as professor of anatomy, it added to the University faculty a surgeon with a war record of eight thousand operations performed in four years of active service. Besides doing some work in England in 1915, Doctor Stowers served as a major in the medical department of the French army from the latter part of 1915 until August, 1919. Doctor Stowers is a graduate of the University of Missouri. He received his A. B. degree here in 1910 and his A. M. in 1911. In February, 1915, he went to England with the American Red Cross. For six months he worked there. Then he served three months in a hospital in France, finally accepting a commission as major in the French army. Soon after, he was sent to work under Dr. Alexis Carrel at Compiegne. He had charge of a military hospital for several months and also worked with a mobile field ambulance train. In 1918 Doctor Stowers was put to work at emergency operations in dugouts at the front. On one occasion a dugout was blown in by shellfire, but Doctor Stowers escaped with slight bruises,, although buried under the ruins. He has the French croix de guerre with five citations and also the Cross of the Legion of Honor.

Healthy Kansas.—The typhoid rate in Kansas last year dropped from 13.4 to 7.7. Dr. S. J. Crumbine, Health Commissioner, says that improved sanitary conditions, anti-typhoid vaccination, and the vigorous preaching of common

sense health rules to young mothers through the child hygiene bureau should be given credit for the slumps in the typhoid and enteritis death rates. Army training, typhoid vaccination and a better general understanding of the necessity of sanitary conditions were the big factors in cutting down the typhoid rate.

Jubilee Meeting of the Jackson County Medical Society.—Five members of the society who have rounded out fifty years of practice, were honored at a banquet given in the City Club rooms on the evening of March 4th, when one hundred and fifty physicians and surgeons were gathered round the banquet board. The members thus honored, all of whom are past the three-score-and-ten mark, were Doctors Jefferson D. Griffith, John S. Mott. Thomas R. Thornton, John Wilson and John C. Rogers. Silver loving cups were presented to each one by the society, as a token of esteem. Dr. J. F. Binnie presided. Dr. Griffith is chief of staff at St. Josephs Hospital and has been identified with that instituution ever since its organization in 1870. Dr. H. Winnett Orr of Lincoln, and Attorney S. B. Ladd, both close friends of Dr. Griffith, were the only visiting guests at the dinner.

Forty Years Ago—The necessity for a telephone at the city hospital already has been recognized by everyone interested, except the members of the city council, and there is said to be reason to hope that they may be brought around to that way of thinking in time so that they will make arrangements at the next meeting for the installation of one.—K. C. Star, Feb. 14, 1880 Not much different today, if one is to judge by daily press criticism of the affairs of General hospital, and no great improvement may be expected until the "General" is divorced from politics.

Electro-Therapeutic Week in Kansas City—The week of May 24 has been selected by Dr. B. B. Grover for his second course of lectures on Electro-Therapy, full details of which will appear in this issue of the Herald. The lectures will be followed by the annual meeting of the Western Electro-Therapeutic Association, May 27 and 28, at which time a number of men of national repute will present papers, including Dr. J. D. Gibson of Denver, who will read a paper, "Physical Modalities in the Treatment of Tuberculosis."

Beer as well as whisky may be prescribed by physicians as medicine, according to a ruling by the prohibition commissioner's legal advisers.

For erysipelas, tincture of cantharus, one dram, in one pint of water, bathe three times per day; this will cure in a few days.

Continuing "The Medical Fortnightly and Laboratory News."

Medical Merald The

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Functional Nasal Obstruction

Function nasal obstruction is of exceedingly common occurrence. An inspection of the use will determine whether the obstruction is organic, functional or subjective. The picture presented varies at different examinations and this variability in the patulency of the nasal fossae is the characteristic phenomenon of functional nasal obstruction and is due to the action of the cavernous tissue in the mucous membrane. This tissue is composed of vascular channels, with muscular walls, amid a network of elastic tissue. Its function is to contract and expand. Blood may so distend those vascular channels that the nasal fossae may be entirely occluded. If this functional activity of the cavernous tissue takes place in accord with physiologic needs it is a normal process. If beyond this, it is pathological and is known as "vasomotor paresis, turgescense of the turbinates," etc. It is under the influence of sympathetic nerves.

Any condition which lowers vaso-motor tone may cause functional nasal obstruction. Patient complained of inability to breathe through the It often alternates on the obstruction changes from side to side. May involve both sides at the same time. It may be influenced by the position of the patient. It is caused by indoor life, overheated, close atmosphere, etc., and it may cause headache.

Functional organic obstruction may be coexisting. Swelling is always present in acute rhinitis. A foreign body may cause unilateral obstruction.

Swollen cavernous tissue presents a smooth appearance, local application of cocaine or adrenalin will cause it to contract and pressure with a probe will produce a furrow.

Hypertrophy of the mucous membrane reveals a rough mucosa, at time nodular, cocaine or adrenalin will cause no contraction, pressure produces no furrow. Swollen cavernous tissue has been mistaken for a polyp. It has been the excuse for various operations on the nose by those who believe surgery their best friend.

In the treatment we have to do with a vasomotor paretic condition and we build up the general health outdoor exercise and cold bathing, perhaps the use of a little strychnia. If the patient fails to take this advice, and it is a short cut to cauterize the mucosa where indicated with a saturated solution of trichloracetic acid on a fine applicator, or a bead of chromic acid fused on the end of a probe. Applications should be made a linear fashion. The result is a scar. The eletcic cautery can be used. This form of treatment may have to be repeated.

Turgescent rhinitis is a frequent condition, and hygienic methods frequently obtain a cure. Removing spurs, and turbinates, submucous resections of the septum have been done for the exercise it gives the surgeon, and the general practitioner should be on his guard.

Let the good work of the good men go on, because conservative treatment is not sufficiently spectacular, nor satisfactorily remunerative. Surgery, what crimes on the human body are done in thy name. P. I. L.

Physicians Wanted for Public Health Service

The United States Civil Service Commission announces an open competitive examination for assistant diretcor of educational work. Vacancies in the Division of Venereal Diseases, Public Health Service, at salaries from \$2,000 to \$4,000. and in positions requiring similar qualifications, at these or higher or lower salaries, will be filled from this examination, unless it is found in the interest of the service to fill any vacancy by reinstatement, transfer, or promotion. Both men and women, if qualified, may enter this examination, but appointing officers have the legal right to specify the sex desired in requesting certification of eligibles. Competitors will not be required to report for examination at any place, but will be rated on written forms.

and the last

Perpetual Youth

Under this caption, Dr. Axel E. Gibson discusses the Voronoff method of interstitial gland implantation (Medical Summary, Jan.) as follows:

The grafting of the interstitials of a goat or monkey involves a step of biological and moral descent which is vastly deeper than that which separates the representatives of different races. It is not merely the drop from one kingdom of nature into the one below, but the exposure of individualized, moral self-consciousness to the brutalizing influences of the untamed, elemental, ungovernable instinct of the animal. It means by opening the channels of gross animal virility to allow the deposition of its muddy currents to enter the highly specalized, mentally and morally intensified organizations of the human kingdom. In other words, the transfer of life and virility through glandular inoculations, from lower to higher kingdoms-from the animal to man—threatens with the same ultimate breakdown of the evolutionary standards of self-consciousness and moral character, as the grafting of an apple branch on the trunk of a shrub oak must imperil the food value of the fruit.

"Natura non saltet"—nature makes no leap was an axiom well known to the doctors of the early centuries. Far before the Darwinian theory it was implicated in the general scientific thought of the time, that the course of evolution proceeds along graded steps of ascending life, with every new attainment of the entity as a logical consequence of causes unfolding into their appropriate and inevitable effects. Hence an attainment of an entity, be it mental or physical, is biologically possible under no other conditions than those of rendering honest, full weight equivalents-measure for measure—in terms of actual improvement of life and health, by a continuous displacement of the old for the new, of the bad for the good, of weakness for strength, of egotism for altruism, of self-service for public service, calling into action the indispensable condition for all moral growth—self-denial. And a redemption from mortal discrepancy, with less based upon a reciprocity between mind and conscience, between power and service, between attainments of life, and the moral purposes of life, becomes a mere process of vital galvanization, an inflation with artificial biological stock values, that must ultimately lead, not only to vital bankruptcy, but to individual and racial extinction.

Man, after all, must redeem his own pledges, and the sooner he assumes his own mental, moral and physical liabilities, the sooner he will find himself vitally solvent to conduct successfully his great business of life—the consummation of old age into a beautiful finale of usefulness, service and altruistic energy.

General Ether Anesthesia Per Rectum

Surgeons are always on the lookout for a method of general anesthesia which will give them maximum security with a minimum of drawbacks. Dating back several years already as it does, the method of etherization per rectum has once again become a current topic in consequence of a discussion at the Societe de Chirurgie where its merits were fully discussed. Here is a summary of what was said on that occasion.

In a report bearing on seventeen cases in which narcosis was obtained by this method, Dr. Vitrac (of Libourns) describes his modus oper-The bowels are emptied on the eve of the operation. On the morning of operation the intestine is freely washed out and an injection of morphine is given. Then, half an hour before the time appointed for the operation, by the aid of a long cannula which should be pushed in a distance of from 15 to 20 centimetres, he introduces a mixture of liquid vaseline and ether (one part of ether to three of vaseline) in the proportion of 30 c.c. for every 10 kilogrammes of body weight. After the operation the intestine is freely washed out with boiled water. The anesthesia lasts about two hours. But the procedure is far from being uniformly successful and complete narcosis was only obtained by Dr. Vitrac in four-tenths of the cases. In five cases out of ten he had to complete anesthesia by the administration of chloroform in the usual way. In one of the ten cases no effect whatever followed the introduction of the etherized vaseline into the rectum.

The advantages of the method are therefore not very conspicuous. But in its favor, it is to be remarked that it is of the greatest assistance in operations on the neck and face, that it is less injurious to the kidney than the usual methods and that it can be employed even unknown to the patient. Some surgeons who approve of the method in certain cases, like it because it brings about narcosis quite insensibly and prolongs the period of anesthesia long after the operation, a valuable asset in cases where the operative sequelae are painful as after many operations on the kidney. On the other hand the debit side of the method is heavily laden. Dr. Wiart, who drew up the report on Dr. Vitrac's paper, had collected 2,500 instances of anesthesia by this method with eight deaths and this number is considerable in view of the mortality with the other methods. Then, too, apart from the mortality, a certain number of serious accidents have been recorded such as pneumonia, intestinal hemorrhage, hematemesis, sloughing of the large intestine, etc., nor are there wanting accidents of less importance such as vomiting and severe abdominal pain.

Possibly, as was remarked Drs. Savariaud and

Heitz-Boyer, a goodly share of the accidents in question might be due to the unduly large amount of ether thus administered. These surgeons hold that we ought never to exceed from 100 to 125 c.c. of ether and that the greatest care requires to be given to the modus operandi. In any case, pending further experience and greater constancy of results, it would not seem that rectal etherization is likely to displace the procedures at present in general use, the more so seeing that we have at our disposal the methods of local and regional anesthesia for cases in which general anesthesia is undesirable or inconvenient.

Knowledge is Power

Socrates said this to his disciples many centuries before Christ, and it has been made the basis of many systems of philosophy ever since his time. He said also that "the only crime is ignorance," that people commit what we call sin, because they are really ignorant of the tragic effects of their acts.

We are just beginning in this day of Christian civilization to apply knowledge to the elimination of venereal diseases. We have applied most everything else in the way of revilement and hysterical reproach; this atmosphere of public opprobrium has conduced to all the "conspiracy of silence" which has sought to cover up and ignore the appealing waste of human life and energies which result from a false standard of decency and a false estimate of baleful ef-

During all the centuries these diseases have taken their frightful toll of human life, much of it vicarious suffering for the commission of others, and in spite of all that science has done for the human race, it was impotent to check these ravages, because the first requisite of knowledge is a clear intelligent valuation of all the elements which enter into conditions, and this clear dispassionate attitude we were unable to possess because of our spurious ideas of modesty.

We probably would have gone emotionally gesticulating about this social leprosy until the end of the planet, had not a world war arisen among the peoples of the earth, which forced us to get down to "brass tacks," put away our hor-rified feelings in lavendar and lace, which is where they should always be kept, and take the necessary steps to provide healthy, vigorous fighting men to arm our battalions, or we would have gone the way of the rest of the degenerate races of the globe.

The first organized effort we ever made to combat this disease was productive of such miraculous results, the Allied Nations of Europe are still talking of it. The greatest thing we did during the war was not downing the Germans, but downing the virulent disease germs which are the tragic incident of sexual promiscuity. put over such a drastic programme in France, the French authorities were amazed at our action but more amazed at our wonderful achievement. for we reduced venereal diseases among our men to one-tenth of one per cent, a miracle when one reflects upon the added dangers accruing from massing great bodies of men together under conditions of privation and hardship, with imminent death stalking ever near.

We did this through a programme of frank statement of bald facts, through all kinds of remedial and curative agencies and supervision: we used all the science and knowledge we possessed and dispensed it freely, but it was not alone the negative phase of the matter which we tackled, but positive as well. A soldier boy, just like any other boy, has to be amused some way. We saw to it that our boys had plenty of amusements of the right kind. A soldier boy, like any other kind of a boy, needs girls and women and the free interchange of the right kind of sexual appeal. We saw to it that our boys had the right kind of female companionship, that all that is stimulating and thrilling and warming and cheering, the real maternal spirit, was given them as a benediction and that helped to save them from the blight of the perverted sex consciousness which plays such a vital part in the development of the young.

It was the United States of America, alone of all the nations of the globe, which performed a miracle in social prophylactics; that does not mean that conditions were ideal, but that they were controllable, and the record in statistics. proves that we have learned a valuable lesson on how to proceed in this most vital matter.

That we have not stopped with making clean. healthy, fighting men, but are now attacking the problem of more importance—making clean. breeding men, clean virile citizens, is evidenced in the efforts the government is now engaged in. through the organization of the physicians, the druggists and public opinion generally, to repudiate absolutely, the old conspiracy of silence. the old false sensitiveness, the old unctuousness which drew clear its skirts from contamination and then went blithely on its way, only to be hauled up later in some terrible tragedy which often included innocent victims and permeated the generations yet unborn, simply because ignorance was confounded with virtue, superstition with science, when a little healthy sunlight of publicity and knowledge would have purified both the bodily and the moral tone of society.

The new weapon of utilizing all the knowledge we possess to combat these ravages does not mean that any one must necessarily suffer humiliation and disgrace because of their affliction, but it does mean that no longer will

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society be willing to allow such victims immunity from the benefits of such expert care and attention as the state can supply because of their oversensitiveness, for disease as we are now recognizing is not an individual matter at all, but a social matter, and as social responsibility must be controlled by social agents.

The war has brought us this—the opportunity to use our knowledge and our skill in fighting this malady which has so long sapped our vital energies, and it has brought us also a different attitude toward all victims of this curse. For we now know that the human race is so inextricably connected with some form of transmission of this blight, that it ill behooves any of us to take aught but a helpful kindly, sympathetic, constructive attitude toward all such unfortunates and to exercise all the influence we possess toward making scientific knowledge of all essentials compulsory through the proper channels, so that our young people shall not plunge into experiences of which they are woefully ignorant, burning the flame of life out in one great emotional debauch, which should throw its beautiful radiance and cheer to light the paths of destiny even into the great beyond. Virginia B. Le Roy.

A Morality Which Is Moral

Under this title Mrs. Virginia B. LeRoy, whose contributions to the Herald on social and sex questions have been most interesting, makes reply to Drs. Edith H. Hooker and Wm. J. Robinson, in their joint discussion on venereal prophylaxis and prostitution. The article by Mrs. LeRoy is one which will appeal to the thinking physician who has viewed with interest the work accomplished by the medical department of the United States army on the battlefield and in camp. The article will appear in the next issue of the Medical Herald and will merit careful consideration by our readers.

The Tri-State Medical Society, at a recent meeting held at Marshall, Texas, elected the following officers for the coming year: President, Dr. C. R. Hargrove of Marshall, Texas; Vice-presidents, Dr. L. H. Lanier of Texarkana, Tex., Dr. H. W. Jarrell of Mansfield, La., and Dr. Joe Becton of Greenville, Texas; Secretary, Dr. F. H. Walke, Shreveport, La.

The Loyal Spirit.—The Nobel prizes for 1919 in economics and medicine, which were offered to Frenchmen, have not been accepted. The refusal was based upon the fact that the Swedish body saw fit to confer the prize for chemistry upon Dr. Haber, the inventor of the poison gases used by the German army during the World War.

Dr. Lloyd Thompson is an interne at the Psychopathic Hospital of Boston and lectures at Harvard Medical School. He is a son of Dr. G. E. Thompson, St. Joseph, Mo.

Dr. V. R. Wilson, formerly of St. Joseph, has located at Rosendale, Mo.

Dr. George Boteler has been appointed assistant health officer of St. Joseph.

Red Cross Donation — Health education brought directly before the people, in the remote rural regions as well as in the larger cities of the nation, will be one of the salient features of the American Red Cross program for the promotion of health and prevention of disease. In line with this the Red Cross has appropriated \$10,000 as a donation to the American Social Hygiene Association to aid that organization in establishing a traveling exhibit to demonstrate to the people a constructive method of dealing with the control of social disease as a part of the nation-wide health campaign. It is the belief of the Red Cross that donations of this sort will prove one of the most effective means by which the society can cooperate in public health work.

Dr. Jokshan Freyman, a resident and physician of Kansas City, Mo., for thirty years, died on Friday night, February 13th, aged 74 years. Dr. Freyman was born in a log house at Sharon, Ohio, Dec. 15th, 1846. He was educated in a country school (the little red school house) and received his medical education at the Cincinnati College of Medicine and Surgery (now the Medical Department of Cincinnati University) in 1877. He was married to Julia V. Austermell, of Hermann, Mo., December 17, 1877, who survives him. He began the practice of medicine in Hermann, Mo., where he continued to reside until 1888, when he moved to Kansas City, where he practiced his profession until the time of his death.

American Medical Editors' Association—The fifty-first annual meeting of the American Medical Editors' Association will be held at the Grunewald Hotel, New Orleans, La., on Monday and Tuesday, April 25th and 27th (during the week of the A. M. A. convention) under the presidency of Dr. Seale Harris, editor of the Southern Medical Journal. A most interesting program has been arranged and every doctor, even remotely interested in medical journalism, will find it to his advantage to attend. It is advisable for you to make early reservation of rooms to assure you of accommodations.

Germ diseases kill off more people than the deadliest wars, says the United States Public Health Service. In 1917 pneumonia and tuberculosis killed 223,000 Americans, more than seven times the number killed in action in France.



"Me Miserable! which way shall I fly Infinite wrath and infinite despair? Which way I fly is hell! myself is hell; And, in the lowest deep, a lower deep Still threatening to devour me opens wide, To which the hell I suffer seems a heaven."

The above quotation from Milton's Paradise Lost, is put on the opening page in a work on Neuro-Syphilis, published in Boston. It is probably very appropriate.

We suspicion that Milton knew about psychoneuroses, psychopathoses, epileptoses, etc., and before he lost his sight he must have been a keen observer.

Nothing ever happens but it could be worse.

Swiss birth statistics show a decline since 1914.

Epilepsy in all its forms may be caused by syphilis.

If you can trace no difference whatever, then all dispute is idle.

What difference would it practically make to anyone if this notion rather than that notion were true?—W. James.

For the fourth time, at the coming session of the New York legislature, an effort will be made to pass a bill providing for compulsory state health insurance.

The present high cost of living deprives many children of sufficient and proper nourishment, therefore an increase in malnutrition. The child is the future.

It is significant that it was a French doctor, Mme. Moutet of Lyons, who arose at the convention as the champion of the illegitimate child; all children and women must be protected indiscriminately.

Both man and horse work in coal mines, yet veterinary authorities agree that pneumokomosis (dust-in-lung-disease) is rare in horses, even in mine horses. The horse breathes through the nose which stops nearly all the dust; not so with man.

Medical laws work well for the quacks, cheap skates and Christian Scientists, to say nothing of chiropractors, those fellows in some way "get by" while the legitimate student of medicine has to comply with the most rigid laws. And again, a man who is good enough to practice in one state is good enough for any other, and no hold up.—J. M. Dodd, Ill. State Journal.

Damaged goods are now found at the veneral clinic.

The blessing or the curse of an act is its eternity, one sinner destroyeth much good.

It is impossible, when offended with any one, not to think him worse than he really is.

A dentist should conduct regular clinics for the treatment of children of the pre-school age.

The first right a child should have is that of being wanted.—Voluntary Parenthood League.

Dr. Friedman has sold his turtle serum to two capitalists for 700,000 marks. Marks are of small value at present.

The one and only argument against the adoption of the English as the universal language is that so few of us really speak it.

War and epidemics bring out the weak spots in our armour of defense against disease. We must get interested during peace.

"Does your husband expect you to obey him?" "Oh, no! He's been married before."—Life.

It is not work that kills men; it is worry. Work is healthy; you can hardly put more upon a man than he can bear. But worry is rust upon the blade.

We have always borrowed from other ages, not only in art, but in everything else. If every age felt compelled to be intellectually independent, civilization would be bankrupt.

The Wassermann test is a test of the patient's resistance to the disease. If the patient has not developed antibodies in his blood, the test may show negative, though he have the disease.

The American bey is a product of the American school. He is at the age then, between 15 and 20 years, when he will make himself physically strong, or weak, and form the ideals and habits that go with him through life.—U. S. Public Health Service.

Punning on words is, Mandsley thinks, an indication of the insane temperament, as also that higher kind of wit which startles us with the use of an idea in a double sense, of both which aptitudes no better example can be given than that of Charles Lamb.

The comptroller has ruled that a doctor may claim as deductions the cost of supplies used by him in the practice of his profession. He is also allowed expenses paid in the operation and repair of an automobile used in making professional calls, dues to professional societies and subscriptions to professional journals. There are in addition his usual business expenses, such as fuellight, water, telephone, etc., and the hire of office assistants.



THE BLIND: THEIR CONDITION AND THE WORK BEING DONE FOR THEM IN THE UNITED STATES—By Harry Best, Ph.D. The Macmillan Company, New York City. Cloth, 763 pages. Price \$4.00.

The author gives us a complete social survey of blindness and the care of the child. He deals with the subject in the broadest and widest manner and from all angles. The attempt is made by the author to find a place in the social cosmos for the blind and so arrange matters that these unfortunates become self-sustaining and relatively useful and happy. The prevention of blindness is fully considered, the education of the blind, their industrial training and their general welfare. It is a book of considerable value, and every physician should read it.

CLINICAL MICROSCOPY AND CHEMISTRY—By F. A. McJunkin, M. D., Professor of Pathology in the Marquette University School of Medicine. Octavo volume of 470 pages with 131 illustrations. Philadelphia and London, W. B. Saunders Company, 1919. Cloth, \$3.50.

This book considers the subject of practical laboratory examinations from the standpoint of the laboratory worker. It differs from other books on the same subject in being more comprehensive. Physicians who do their own laboratory work find it most useful. It deals with the organization of the laboratory, the making of post mortems, the staining of tissue preparations, the usual examinations of the blood, urine, gastric contents, etc. The methods presented are practical, the illustrations are very good and the book is well written.

A TEXT BOOK OF PATHOLOGY—By Francis Delafield and T. M. Prudden, New York. Revised by Francis C. Wood, New York. Published by Wm. Wood & Co., New York. Price \$7.50.

This well known text-book has reached its eleventh edition. It has been brought up to date by Dr. Wood, and the details of many parts have been rewritten. Many new illustrations have been added. The principal revisions are the chapters on tumors, on the urinary organs; on the reproductive organs of the female, and on the bones and joints. The book is written primarily for the student and practitioner of medicine or surgery. It presents material agreed on by the foremost investigators on the subject, not matters still under active discussion. Pathological physiology has received proper attention.

It is a standard text-book and it represents pathology up to date.

A TEXT-BOOK OF MATERIA MEDICA FOR NURSES—By A. L. Muirhead, M. D., Professor Pharmacology, Creighton Medical College, Omaha, Nebraska. Illustrated, 183 pages, good print, good quality paper. Price \$1.50. Published by C. V. Mosby Co., St. Louis, Mo., 1919.

Dr. Muirhead has seen the importance of a materia medica to fit into the schedule of 24 hours, assigned to this subject during the nurse's entire training course. It is condensed into 24 chapters, one chapter for each hour of the schedule, and does away with a sea of confusion that the student nurse experiences in trying to digest a large volume of unsystematized text. This book has the information at easy command of the nurse without waste of time.

S. G. B.

THE UNGEARED MIND—By Robert Howland Chase, A. M., M. D., Physician-in-Chief Friends Hospital for Mental Diseases; Formerly Resident Physician State Hospital, Morristown, Pa.; Member American Medica-Psychological Association, the Philadelphia Medical Psychological Association and the Philadelphia Neurological and Psychiatric Societies; Author General Paresis, Mental Medicine and Nursing and Histories of Friends Hospital. Illustrated, a book of 351 pages, with large easy type and published by F. B. Davis Co., Philadelphia, Pa., 1919.

This is a readable information book, semiscientific, entertaining and instructive to both medical and non-medical students of popular science; it's not a treatise on insanity, therefore is largely free from the technical psychologic terms and phrases that offset little enlightenment other than the noise they make. The "Some Questions Relating to the Insane," "The Beneficial and Baneful Sides of the Imagination," and "The Broad-Belt of Borderline" in "An Alienist's Table Talk" are the observation of a lifetime spent with the insane. The author's style is brevity, therefore not tiresome, but pithy to the point of interest. S. G. B.

A TEXTBOOK OF PHYSIOLOGY FOR NURSES—By William Gay Christian, M. D., Professor of Anatomy, Medical College of Virginia, and Charles C. Haskell, M. A., M. D., Professor of Psysiology and Pharmacology, Medical College of Virginia. Illustrated. St. Louis: C. V. Mosby Company, 1918. (Price \$1.75.)

A very well balanced little treatise for the purpose indicated. It gives the ground work of the subject very clearly. It is free from the many debated and argued points of physiology. It is a primer, but a scientific one. Technical expressions are used, since, as the author states, he presumes the nurse has had some anatomy, physics and chemistry. The nurse who masters this little work, and it may easily be done, is in possession of a broad ground work of the subject. The illustrations are numerous and telling. No originality is claimed except that of arrangement and treatment, and in these the author excels.

J. M. B.

NOTE—The Medical Herald's Kansas City office will supply any book reviewed in this department at publisher's price, prepaid. If an order for two books be sent at any one time, the purchaser will be entitled to a six months' subscription to the Herald. This plan is arranged for the convenience of our readers, and we trust it will stimulate trade in the direction of good books.—Editor.

CEREBRO-SPINAL FLUID IN HEALTH AND DISEASE—By Abraham Levinson, B. S., M. D., Associate in Pediatrics, Northwestern University Medical School; Associate Pediatrician, Sarah Morris Children's Hospital of the Michael Reese Hospital, Chicago; Attending Physician, Children's Department, Chicago-Winfield Tuberculosis Sanitarium. With a Foreword by Ludwig Hekton, M. D., with fifty-six illustrations, including five colored plates. Published by C. V. Mosby Co., St. Louis, Mo., 1919. Price \$3.00.

This is a little wonder time saving book to one who must otherwise do endless searching, often in vain, for working information on the cerebro-spinal fluid. The author gives here a remarkable condensation of the facts pertaining. first, to normal and second, to abnormal spinal fluid, facts not familiarized but should be first familiarized by those who must do this work in spite of their inefficiency. This contribution is a marked credit to the author's advance stride in medicine. He modestly claims the book's "shortcomings and omissions," but if there are any they are lost in the wealth of information given on the "cerebro-spinal serum in health and in disease." S. G. B.

PSYCHIATRIC - NEUROLOGIC EXAMINATION METHODS WITH SPECIAL REFERENCE TO THE SIGNIFICANCE OF SIGNS AND SYMPTOMS—By Dr. August Wimmer, Director St. Hans Hospital, near Copenhagen, Denmark. Authorized translation by Andrew W. Hoisholt, M. D., Medical Superintendent Napa State Hospital; Professor Psychiatry, Medical Department Leland Stanford University, San Francisco, Cal. Price \$2.00. Published by C. V. Mosby Co., St. Louis, Mo.

A brief of 177 pages to teach students and physicians how to make an examination, which means making diagnoses, the secret fundamental of psychiatric-neurologic practice. Near special-

ists will appreciate the weaving in of some "normal psychologic or anatomo-physiologic data" with sufficient "general symptomatology belonging to psycho-neuropathology" to clear the text. Last but not least is the brief and clear presentation of making spinal punctures and the details of spinal fluid examinations in relation to diseases of the central nervous system. A useful little book, to the point, systematized and without useless verbiage.

S. G. B.

Credit to Rotary—Rotary clubs throughout the United States have been a bulwark for the United States Public Health Service in its campaign for the eradication of venereal diseases and are today furnishing active cooperation in a number of cities. The Rotary clubs have been especially influential in Ohio in furthering the campaign and many clinics were established as a direct result of the intensive campaign launched by Rotary. This is particularly true of Lima. Ohio, in which the Rotary Club got the city to appropriate \$5,000 for the maintenance of a clinic when every other effort had failed to interest the city officials. Rotary clubs have taken a most active interest in having the big industries throughout the country open free clinics for employes and have made much headway in this direction. About 50 per cent of the clubs have been directly appealed to by the Public Health Service and approximately 20 per cent of them have appointed active committees to cooperate.

Dr. Jones says that if there is any remedy especially deserving our confidence in heart affections, resulting from rheumatism, that remedy is scutellaria lateriflora.

FACTS ABOUT CANCER

(Contributed by the U.S. Public Health Service)

Cancer is unquestionably increasing throughout the world. At the beginning, cancer is usually painless and difficult to detect. At its first small growth it can be safely and easily removed by a competent surgeon.

Cancer is not a constitutional or blood disease.

Cancer is not contagious.

Cancer is, practically speaking, not hereditary.

Every lump in the breast should be examined by a competent doctor.

Persistent abnormal discharge or bleeding is suspicious.

Sores, cracks, lacerations, lumps, and ulcers which do not heal, and warts, moles, or birthmarks which change in size, color, or appearance, may turn into cancer unless treated and cured.

Probably 60 per cent of cancers of the rectum are first regarded as piles. Insist on a thorough medical examination.

Continued irritation in some form is the usual cause of cancer. It rarely results from a sudden injury.

A doctor who treats a suspicious symptom without making a thorough examination does not know his business.

To aid in this work the United States Public Health Service has carefully prepared a neat, pocket-sized booklet, "Cancer, Facts Which Every Adult Should Know," written in lay terms. This book will be forwarded on application to the Public Health Service, Washington.

AMERICAN CONGRESS ON INTERNAL MEDICINE

The fourth annual congress was held at Chicago, Ill., Feb. 23-28 inclusive. According to Dr. Reynold Webb Wilcox, president of the American College of Physicians, the meeting constituted the best week of medical clinics ever offered to the American profession. The headquarters of the sessions was Congress hotel on Michigan avenue, and the atmosphere of the hostelry was intensely medical during the entire week by doctors from Maine to California, and from Canada to Florida, inclusive. The mornings were devoted to clinics held at the various hospitals under men of national repute from the large universities east and west. The afternoon sessions were held at the hotel in the Florentine room, and consisted of talks by eminent clinicians upon advanced thought in internal medicine. Tuesday evening was devoted to a smoker with good eats, smokes, cheer, jokes and fellowship.

Wednesday evening was devoted to a joint meeting of the American Congress on Internal Medicine and the Chicago Medical Society. The address of the occasion was delivered by Prof. Alfred Scott Warthin, chief of the department of pathology of the University of Michigan, on the Medical Aspects of Gassing in Warfare. Discussion was opened by Dr. Joseph Miller, Chicago University, Dr. Russell Wilder, Mayo Foundation, Rochester, Minn., and Dr. Frank Smithies, Uni-

versity of Illinois.

Thursday afternoon was spent at Chicago Municipal Tuberculosis Sanitarium, an area of 160 acres, enclosing buildings galore for dealing with the disease from every possible view point. The institu-tion was declared to be an honor to the city. The talks made by Commissioner of Health Dr. John Hill Robinson and Dr. Francis M. Pottenger of California repaid us for the week's effort and expense. Lunch was served to the Congress through the countesy of the City of Chicago.

Thursday at 8 p. m. the annual banquet was served at the hotel, the Florentine room proving inadequate to accommodate the attendance, the Gold room was used for the purpose. The renowned and venerable Dr. Glentworth R. Butler of New York, president of the Congress, presided as toastmaster. Address of welcome was made by Dr. Fowler, president of Chicago Medical Association. Response by Dr. A. Caille of New York, treasurer of the Congress. Our old friend and prime mover, Heinrich Stern, first secretary general of the association, was missed. He has passed to the great beyond. Greetings from Canada were given beautifully by Dr. O. W. Moody of Winnipeg, Canada. Response from the South was given in a jovial vein by Dr. H. E. Tuley of Louisville, Ky. Congratulations, advice and felicitations from American College of Surgeons were presented by the famous surgeon, Dr. A. J. Oschner of Chicago.

At 10 p. m. the Americal College of Physicians convened, after donning cap and gown and general hand-shaking among the 226 candidates about to be received as fellows. Among the 1,620 names considered only this number were admitted at this session. Dr. R. W. Wilcox of New York is never at once so dignified and congenial as when presiding at the convocations of the American College of Physicians. His instructions to candidates as well as his annual address are always typically wise, lofty and profound. The post of secretry general, so ably filled by our lamented Stern of New York, is now presided over by the brilliant Dr. Frank Smithies of Illinois University, who is loved by his students and admired specially by the gastro-enterologic fellows of the Congress.

The clinics of Dr. Smithles held the day following, at the Illinois University, and at the Public Health and Marine Hospital, alone repaid one for the week's effort.

Among the Missouri Valley men admitted this session were Murphy and Hoxie of Kansas City, Throckmorton and Granville Ryan of Des Moines, Sachs and Dunn of Omaha, and Shuman of Sioux City. Clinics were continued during Friday and Saturday at all hospitals. The Congress on the whole was most delightful and intensely profitable. The next meeting will be held at Baltimore in 1921. At was most delightful and intensely profitable. the end of the week the men separated to go home to some one of almost very state in the union, with a "farewell, I'll see you in New Orleans in April."

J. M. B.

NO RECREATION FOR HER

A newly married couple, visiting the groom's parents in Paris, decided to spend a day in the Art Gallery. It was suggested that they take with them the old black "mammy," who had been in the family for many years, but who had never seen the Louvre. "Mammy" was quite heavy and short of breath. Becoming exhausted, she told the young people that she would sit down and wait for them while they looked at the pictures in another part of the hall. It happened that "Mammy" chose her seat in the room occupied by the statuary, which as usual was displayed without drapery. Upon the return of the young folks, the groom asked her how she enjoyed the statuary. Whereupon, "Mammy" exclaimed, "Oh Lord, Honey, I'se undressed you and bathed you millions of times, and I'se undressed and bathed your Daddy before you, so dese here tings 'aint no recreation for me."—Harper's

THE ARMY MADE 'EM EAT MORE

Army life has been blamed for a good many things. Now comes Stanley Sisson, manager of the "Commons," the student cafeteria at the Missouri State University, and gives an explanation of why the average price of meals has increased from 17 cents in 1917 to 26.6 cents at present. The army did it, he says. Part of the 9-cent increase can be blamed on the increased cost of foodstuffs and labor, he admits, but most of it is directly traceable to the demand for heavier and more expensive meals by the students, especially by the men who have been in the army. More students are eating meats than ever before.

M. U. LEGION CHARTER RECEIVED

The University of Missouri chapter of the American Legion held a meeting in Columbia recently and perfected its organization. The charter has been received and a permanent organization is ready to take charge of the post's affairs. It is the hope of those in charge of the work to make the local post a means by which strong student leaders may be developed.

Local Nerve Specialists assert that Kansas City people must slow up in their pace or suffer a breakdown. The warning is well meant, but any suggestion that Kansas City should moderate its gait in the beginning of this new business year is absurd, of course.—K. C. Journal.

Orange Juice for the Flu.-Dr. George Starr White of Los Angeles treats influenza with orange juice and restricted diet.

If you would get the greatest benefit from your nitrate of silver solutions, make them up with doubly distilled water.

The Western Electro-Therapeutic Association

Organized in Kansas City on May 8th, for the purpose of cultivating and promoting knowledge in whatever relates to the scientific application of electricity and other physical measures in medicine and surgery.

OFFICERS FOR 1919-1920

President. Dr. B. B. Grover, Colorado Springs, Colo. First Vice-Pres. Dr. W. P. Grimes, Kansas City, Mo. Second Vice-Pres. Dr. Theo. F. Clark, Eldorado, Kas.

Secretary. Dr. Chas. Wood Fassett, Kansas City, Mo. Treasurer.....Dr. Chas. Keown, Independence, Mo. Registrar.....Dr. E. A. Nelson, Phillipsburg, Kas.

TRUSTEES

 The next meeting will be held at Kansas City, Mo., May 27 and 28, 1920.



Official Call for Papers: The annual meeting of the Western Electro-Therapeutic Association will be held in the Little Theatre, Kansas City, Mo., Thursday and Friday, May 27 and 28, 1920. Those desiring to read papers will kindly forward their titles to the secretary within the next thirty days, to secure a place upon the program. The medical profession is cordially invited to attend this meeting. B. B. Grover, president. Chas. Wood Fassett, secretary, 536 Ridge Building, Kansas City, Mo.

The Systematic Development of X-Ray Plates and Films, by Lehman Wendell, B. S., D. D. S., Chief of Photographic Work, Instructor of Prosthetics and Orthodontia, College of Dentistry, University of Minnesota. Cloth, price \$2.00. C. V. Mosby Company, St. Louis. Mo.

The author states that the object of his book lies in "the hope that it will throw some needed light upon a much neglected branch of radiography."

The author of this laboratory manual of dark room technic has kept in mind the needs of the old timer as well as the student in radiography. He has endeavored to place in the hands of the student a manual giving detailed specific instructions of each step in the development of x-ray plates and films necessary to the production of first class radiographs. He lays special stress upon that portion of Chapter III which deals with the tank method of development. He says, "there is no question but that the tank method is best suited for the worker whose knowledge of photography is limited."

He has treated the subject in a scientific and practical way that appeals to one who desires to turn out the best possible work. He treats of the fundamentals of photographic chemistry, the basic principles and methods of development and gives developing formulas and directions in

full how to bring out all there is on a plate. One Chapter is devoted to lantern slide making.

The book is well written in such style as to make it easy of comprehension and altogether is a valuable volume for the use of all who do x-ray work.

B. B. G.

A New High Frequency Electrode

A new high frequency electrode known as the "Non-Vacuum" Electrode has lately been perfected and is offered to the profession as a safe and efficient electrode for use with the high frequency current. The claims made for it are: strong construction, a ready substitute for any metal, vacuum or rubber electrode for internal or external application, increase of oscillations and frequencies over the vacuum electrode, 50 per cent increase in efficiency, almost non-breakable, increase of heat penetration, fine adjustment and excellent appearance. It is made in any form desired and to fit any style of handle. It is constructed in such manner that the connecting element is in direct contact with the coil, eliminating the necessity of penetrating the glass and breaking down the resistance of the vacuum which makes it practically puncture proof and non-collapsable.

Failure to Dispense Drug in Decreasing Quantities.—In another morphine case, the U. S. Circuit Court of Appeals for the Fifth Circuit, in affirming a conviction in the Oakshette Case, observed that there was evidence from which the jury might infer that defenant administered the drug, not in good faith to cure his patients but to satisfy their craving as addicts for the drug, in the fact that constant quantities were furnished to a number of persons over periods as much as three months. The sufficiency of defendant's explanations as to why he failed to reduce the quantities especially to those he was attempting to cure was for the jury.

ELECTRO-THERAPEUTIC WEEK IN KANSAS CITY

At the Little Theatre, May 24, 25, 26, 27 and 28, 1920.

SECOND LECTURE COURSE IN ELECTRO-THERAPY

by Dr. B. B. GROVER, May 24 to 26.

Dr. Jefferson D. Gibson, of Denver, will give a special demonstration of his technic in the treatment of pulmonary tuberculosis.

Classes are now being formed. Number limited.

Western Electro-Therapeutic Association, Annual Meeting, May 27-28. Send for program and registration blank. Chas. Wood Fassett, M. D., Secretary, Kansas City, Mo.

WESTERN SCHOOL OF ELECTRO-THERAPY

Dr. Burton Baker Grover, president of the Western Electro-Therapeutic Association, having been solicited by many physicians to return to Kansas City and deliver a second course of lectures on electro-therapy, has decided to comply with the request and such a course will be given at the Little Theatre, in Kansas City, May 24, 25 and 26. The annual meeting of the Western Electro-Therapeutic Association will be held the same week, thus enabling physicians to attend both.

The lectures will be demonstrated by lantern slides.

The following is only a part of the many interesting subjects that will be presented:

Electricity Defined

Origin of the science of electricity. Atomic theory and electrons. Progress of electricity. The truth about medical electricity. Energy and its transformation. Classification of electricity. Potential, voltage, amperage, ohms, coulombs and watts all thoroughly explained. Direction and polar effects. The galvanic current followed from the primary cell to the dynamo. Resistance and rheostats, milliammeters, volt meters and how constructed; conductors and insulators; magnetism and magnets; electro-magnetic induction; inductance and inductance coils; transformers; choke coils; motor-dynamo; auto transformers; requisites of production of x-rays; x-ray tubes; how to construct a simple coil; condensers; electrolysis; electrolytic effects and their importance in therapeutics; ionization; administration of drugs by phoresis.

Application of High Frequency Currents to Diseased Conditions

Useless high frequency machines; high frequency technic; auto-condensation, its physiology and application; diathermy; desiccation; carbonization, fulguration; how to remove tumors from the bladder; how to tunnel a prostate in cases of obstruction from hypertrophy.

Static Electricity and How to Use It

Sinusodial current therapy; intestinal stasis, its causes, results and treatment; indicanuria; physiology of the galvanic current; electrodiagnosis; war injuries and treatment; treatment of gonorrhea by galvanism; technic of cupric ionization in chronic gonorrhea; fissures; fistulae and their treatment; ionization treatment of arthritis.

Faradism

Good and bad coils; the Bristow coil; essentials of a good wall plate; chemical rectifiers; why static machines are idle; blood pressure explained thoroughly; the sphygmomanometer and technic; blood pressure in surgery, obstetrics, typhoid and tuberculosis; significance of hypotension and hypertension; effects of electricity on metabolism in cardio-renal disease; how to differentiate the primary seat of cardio-renal disease.

Hyperpiesia

The many causes of hypertension demonstrated by lantern slides; genito-urinary diseases and their treatment; how to drain a prostate without surgery; skin diseases and their treatment; ideal treatment of hemorrhoids; goitre and its treatment; technic of every disease amenable to electric treatment explained; diatheramy in bronchitis, pneumonia and tuberculosis; diathermy in heart disease; pain, its significance, cause and treatment; headaches and backaches; diagnosis of digestive pains; sarco-iliac disease; neuralgia and neuritis; shoulder pain; pains emanating from the pelvis; sciatica, etc.; x-ray machines and roentgen therapy.

The technic of application of all electric modalities demonstrated after each afternoon lecture.

Electro-therapeutic clinics will be held; interesting medical and surgical clinics will be held at the different hospitals from 8 to 10 a.m. each day. Classes will necessarily be limited.

For further information, address Dr. Chas. Wood Fassett, secretary, Western Electro-Therapeutic Association, 536 Ridge Building, Kansas City, Mo.

Every Watch a Compass.—For the benefit of our readers, some of whom may not be familiar with the method used by many travellers, we are reprinting the instructions for using your watch as a compass. Point the hour hand to the sun and you will find that south is exactly half way between the hour and the figure xii, on the watch. For instance: suppose your watch says four o'clock; point the hand indicating four directly to the sun and you will find that the figure ii, on the watch, is exactly south. Suppose that it is eight o'clock, point the hand indicating eight to the sun and the figure x, on the watch, will be found to be due south.

[&]quot;You say there are microbes in kisses?" the young lady asked the doctor.

[&]quot;There are," replied the medical man.

[&]quot;What disease do they bring?"
"Palpitation of the heart, for one."

THE BUCHANAN COUNTY MEDICAL SOCIETY

(Organized April 14, 1903)

OFFICERS FOR 1920

President	I. J. Dandurant
First Vic	e-President
Second Vi	ice-PresidentT. M. Paul
	O. C. Gebhart
	J. M. Bell
Censors—. H. La	J. I. Byrne, 1920; P. I. Leonard, 1921; F. dd, 1920-1921-1922.
Delegates 1920-1	F. H. Spencer, 1920-1921; Daniel Morton, 921.
Alternates 1920-1	3-A. E. Burgher, 1920-1921; W. M. Minton, 921.
Council-C	O. C. Gebhart, expires 1920.
	

Meetings held first and third Wednesdays, 8 p. m., in Commerce Club rooms.

COMMITTEES FOR 1920

Executive—W. T. Elam, C. H. Wallace, A. B. McGlothlan.

Public Health and Legislation—C. R. Woodson, Daniel Morton, P. I. Leonard.

Program-H. W. Carle, F. H. Ladd, A. L. Gray. Library-H. K. Wallace, H. J. Ravold, E. S. Ballard.

Medical Service—W. H. Minton, 1920; H. W. Carle, 1920-1921; T. M. Paul, 1920-1921-1922.

Membership-F. H. Spencer, C. A. Good, Jno. Doyle. Tuberculosis-O. C. Gebhart, J. I. Byrne, Thos. Redmond.

Economics-Caryl Potter, W. J. McGill, H. S. Forgrave.

Good Milk-E. S. Ballard, O. C. Gebhart, J. F. Owens.

February 18, 1920

The president, Dr. Dandurant, called the meeting to order. The minutes of February 4, 1920, were read and approved.

Dr. Dandurant reported that Mr. Bonham, of the Physicians and Surgeons Exchange, was present and that he had a proposition to present to the society. Motion by Dr. Kenney that Mr. Bonham be granted the privilege of the floor, seconded by Dr. Spencer, carried.

Mr. Bonham presented a written report on proposed changes in the management of the exchange. Motion by Dr. Spencer to refer this report to the Committee on Economics, seconded by Dr. Woodson, carried.

Dr. Woodson presented the subject "Recognition of the Early Manifestations of Diseases of the Central Nervous System." Discussion by Drs. Leonard, McGlothlan, Bansbach, Higdon and Kenney.

Adjourned-10:30 p. m. Attendance-18.

Clinic February 26, 1920.

Program given by the Welfare Board Staff at Noyes Hospital, presented a series of six surgical subjects.

This program was supplemented by Captain Chris Samson, M. C., U. S. Army, who has charge of the physio-therapy division of Government Hospital No. 41 at Staten Island. Captain Samson read a paper reporting in detail the work of his division and also discussed a series of excellent lantern slides that illustrated many interesting phases of his work.

Motion by Dr. Potter that the society tender Captain Samson a vote of thanks for presenting this very interesting subject, seconded by Dr. Renaud, carried. Adjourned 11 p. m. Attendance 22.

Special Meeting March 1, 1920.

The special meeting to hear the roport of the Public Health and Legislation committee relative to their investigation of the Smallpox Isolation Hospital and the City Isolation Hospital located at 22nd and Sacramento streets, called to order by the president, Dr. Dandurant, at 7:15 p. m., at Commerce Club rooms.

Written report submitted by the committee was read by the secretary.

Motion by Dr. Elam that the society adopt and endorse the report of the committee and that the report be filed by the secretary, seconded by Dr. "arber, carried.

Motion by Dr. Elam that the society attend in a body the meeting of the city council this date, seconded by Dr. Farber, carried.

Adjourned 8 p. m. Attendance 14.

March 3, 1920.

The regular business session of the Buchanan County Medical Society was held at the Commerce Club rooms March 3, 1920. All officers except the seecrtary being absent, the secretary called the meeting to order at 8:20 p. m. Dr. F. H. Ladd was elected temporary chairman.

The minutes of the meetings Feb. 18, 1920, the clinic Feb. 26, 1920, and special meeting March 1, 1920, were read and approved.

Dr. Byron T. Quigley, on transfer from Holt County Medical Society, was duly elected a member of this society.

Dr. H. S. Conrad, first vice-president, came at 8:30 p. m., and was given the chair.

The following bills were allowed and warrants ordered drawn:

Lon. Hardman, \$4.42; banquet committee, Paul Harris (printing), \$1.75.

The secretary read a communication from Dr. Fred J. Taussig, St. Louis, Mo., asking that all information possible he furnished the American Secretary formation possible be furnished the American Society for the Control of Cancer, concerning the cancer sanitarium at Savannah, Mo. This letter was referred to the Public Health and Legislation committee.

The secretary read a letter from the secretary of the Missouri State Medical Association relative to the three delegates elected by this society. The present paid membership only entitles this society to two delegates.

Motion by Dr. Kenney that the secretary send a letter to the members on the delinquent list stating why dues should be paid at once, seconded by Dr. Ladd, carried.

Adjourned 9 p. m. Attendance 14. OLIVER C. GEBHART, Secy.

Isn't it the Truth?—Nobody wants to hear of your hard luck, and few, envy being a common trait, care to hear of your success

Induration around a penile sore does not necessarily make it a chancre. You don't know what was done to it before you saw it. Let your diagnosis be founded on other facts than this one.

DROPSY

Indications:
Dropsy of any origin,
Bright's Disease,
Valvular
Diseases,
Heart Trouble following Influenza, Cirrhosis,

Anasarca.

This is an advertisement of our sole product, into which we put all our efforts to produce as nearly a perfect remedy as possible, for just two of the many ailments of humanity which you are called upon to treat.

DROPSY AND HEART DISEASE

ANEDEMIN doesn't always relieve even these, but it will give you a better result in a greater number of cases than any other remedy, and do it without danger to your patient and with no bad after-effects It has no cumulative action and produces no stomach disturbance; is a powerful diuretic without irritating.

Sample, literature with formula to physicians.

ANEDEMIN CHEMICAL COMPANY, Chattanooga, Tenn., U. S. A.

Anedemin Chemical					
Company, Inc.					
Chattanooga, Tenn.					
and sample and bookle					

Name	М. Г
City	·
State	

Notes on Reliable Remedies

Colds and Influenza—The late Theodore Roosevelt once said that this world could not be considered a fit place for anyone to live in if it was not a fit place for all to live in. It must be apparent that the prevention of the "common" or recurring cold, and that type of coryza generally designated "grip" or epidemic cold, would go a long way toward making this old world a more livable place. Rule-of-thumb procedure has never been successful in the treatment of these conditions and related ailments of the upper respiratory tract, and something very esential has been lacking in our preventive measures. Modern scientific teaching holds out the hope that there is now to be had, in prophylactic vaccination and therapeutic inoculations with the appropriate vacine, a more rational method of treatment and prevention than hitherto practiced. The practical application of the method over a period of several years has in fact been most convincing. Individuals who formerly suffered from repeated attacks of colds have remained entirely free from all symptoms for several months after vaccination, or have found themselves victims fewer times and with milder symptoms. Physicians who have used the vaccine in the treatment of the established infections find the attacks shortened and symptoms quickly abated after a few doses of vaccine. It is in the early fall months that these maladies are most prevalent. Recurrences of influenza in various sections of the country have also been predicted for the fall months. The outbreaks will naturally follow in the wake of, or in the

point of incidence be simultaneous with "common colds." The benefits of prophylactic vaccination for the public should therefore be urged by physicians and health officers. The organisms concerned in the symptoms and making up the "malignant symbiosis" of influenza are the same as those responsible for the infections with which we are more familiar and from which we are never free. To build up the individual's resistance against these organisms is rational, since it is the complications of influenza which make this one of the least fatal of all diseases, one of the most fatal. It is reported by the Lilly Laboratories at Indianapolis that the demand for its Influenza Mixed Vaccine is increasing materially. This product is especially applicable for the prophylaxis and treatment of influenzal conditions. inasmuch as the organisms entering into its composition were isolated from ante and post mortem cases of influenza from all sections of the country durning the epidemic of last winter.

Hydrogen Peroxide and Phenol; a new Method of Differential Diagnosis—In commenting on Soresi's recent experience with phenol applications, Dr. A. Perez Miro, professor of therapeutics in the University of Havana, Cuba, describes a new method of differential diagnosis, which he has successfully employed during the past eight years (Journal American Medical Association, June 14, 1919, p. 1785), for determining the presence of pathological alterations in the submucous or subepidermic tissue. Most physicians are familiar with the use of liquid crystallizable phenol (full strength) by application in handling surface infections, ingrowing toenails, furuncles, acne, ulcerations or infection of the hysterovaginal folds. The phenol produces a whitish spot, or line which soon becomes analgesic. Miro has found that if this blanched tissue is touched with

THE TEST OF THE TAMPON

The test of the tampon lies in the action and effect of the medicament it carries upon existing local inflammatory processes. Commonly used agents of this sort act only indirectly as a rule. DIONOL is something decidedly different. It acts efficiently because DIONOL reaches and affects local inflammation, acting in accord with the electro-pathology of this morbid process.

USE DIONOL ON TAMPONS

in the treatment of

Endometritis Ovaritis Salpingitis Cervical Ulceration Pelvic Cellulitis Cystitis Metritis Leucorrhoea Vaginitis

JUDGE DIONOL BY PERFORMANCE

The Dionol Co., Detroit, Mich. Dept. 27. Please send literature, Case Reports, etc.							
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The Dionol Co.

864 Woodward Ave.,

Detroit, Michigan.

undiluted hydrogen peroxide (Dioxogen is to be preferred because of its purity and strength) it will not disappear if the tissues are normal; but if the submucous or subepidermic tissues have suffered pathologic alterations, the white spot or line will darken until it becomes black, and the nearer to the surface the affected tissues lie the darker it will become. This black spot is in reality a scar which can be opened slowly, since it is obtunded by the phenol, and the incision will invariably lead to the underlying pus-pocket or pathological tissues. Miro considers this a splendid method of differential diagnosis, prognosis and treatment. Thus if a Volpeau's syphilitic chancre, healed in the "shirt-button" way, is submitted to this test and the white stain becomes grayish and studded with darker spots, the indications are that some abnormal tissues still persist. The test application will usually result in the disappearance of the false healing membrane in a day or two and a hollow with a hard rim will result. The treatment is then repeated every 24 hours until all the hardness disappears and true healing takes place. Miro handles suppurating bubos in a similar manner. The most prominent part of the bubo is first touched with phenol. Peroxide of hydrogen (Dioxogen preferably) should then be applied and if the diagnostic black line appears it is incised, the pus emptied and after drying the cavity is packed with two tampons of cotton, one moistened with phenol, the other soaked with Dioxogen This procedure cleanses the cavity better than the curet and without pain, hemorrhage or microbial growth. The same method is also applicable to furuncles, gummas, ulcerations, gum abscesses, suppurating hematocles and tonsilar abscesses.

Doctor, Double Your Auto Service—The "Moore" Auxiliary Transmission is designed for use on Ford

cars of any type, and in the underdrive gear ratio it will double the present power of the car, enabling it to pull through mud, snow, sand, or up hills where the power of the regular Ford car is not quite sufficient to give satisfactory service. The "Moore" is a compact set of gears applied to the driving mechnism of the Ford car, without altering the original design or control, and operated with a separate control lever. Speed changes are made only at the will of the driver. as the control lever locks in each position. The "Moore," equipped Ford has a range of four forward and two reverse speeds: Ford high, Moore intermediate, Ford low, Moore emergency low, Ford reverse and Moore emergency reverse. For further information write the factory. Tractor-Train Company, 1349 Myrtle Street, Los Angeles, California. Tractor-Train Company of Indiana, Connersville, Indiana.

Fellows' Syrup of the Hypophosphites contairs the "chemical foods" calcium, sodium, potassium, iron, manganese, and phosphorus, together with quinine and strychnine (the equivalent of grain 1-64 of alkaloidal strychnia to the fluid drachm), agreeably blended in the form of a bland and stable syrup. thus supplies the nutritive action of the chemical foods, plus the dynamic properties of quinine and strychnine. It is easily assimilable, pleasant to tak; prompt in action, and efficient in effect. The miterials employed are of the highest purity, and in its manufacture the utmost care is taken to secure and maintain uniformity, stability and therapeutic actiity. Clinical evidence, as to the value of Fellow: Syrup in the relief of debility and disease, has been accumulating from all parts of the globe for over half a century. Any physician who may not be fimiliar with the preparation, and who may desire to test it clinically, is invited to write for literature. clinical reports, and samples.

The Management of an Infant's Diet

Infants' Stools

Regularity in bowel movements contributes much toward normal, healthful progress, and a knowledge of the number and character of the stools during each twenty-four hours is an important part of the general

management of early life and assists much in properly adjusting the diet.

Suggestions for the regulation of infants' stools by slight changes in the make-up of the diet and particularly in relation to

Constipated Movements

are given in our book, "Formulas for Infant Feeding," and in a pamphlet devoted especially to this subject. This literature will be sent to physicians who are interested in the matter.

Mellin's Food Company,

Boston, Mass.

Dichloramine-T in Tablet Form-After many months of experimentation, Dichloramine-T is now presented to the medical profession by the Abbott Laboratories in tablet form. Each tablet contains 4.6 grains of Dichloramine-T. One of these tablets dissolved in 1 ounce Chlorcosane makes a 1 per cent solution. By their use, solutions of any suitable strength may be prepared on short notice, even at the patient's bedside. Abbott's Dichloramine-T tablets, or "A-D-T" tablets as they are sometimes termed, will be found to be very stable, accurate as to dosage, easily carried in the surgeon's satchel or machine case and easy to dispense. Dichloramine-T has become familiar to most surgeons. To those who are unfamiliar with this remarkable antiseptic, developed by Dr. H. D. Dakin, literature and prices will be sent on request to the Abbott Laboratories, of Chicago, headquarters for the Dakin antiseptics.

Cascara Evacuate or "Aromatic" Cascara—There are two things about Cascara Evacuant that physicians like-first, its activity; second, its pleasant taste. Cascara Evacuant is nearly twice as active as the "aromatic cascaras." This is due to a special process employed in making Cascara Evacuant—a process devised about twenty years ago by a member of the chemical research staff of Parke, Davis & Co. By the use of a neutral solvent this investigator succeeded in removing the bitter glucoside of cascara, without altering the other constituents of the drug. "Aromatic cascaras," as most physicians know, are prepared by destroying the bitter glucoside of the bark by the addition of magnesium oxide or lime. These alkalies destroy not only the bitter glucoside, but, to a certain extent, the other constituents of cascara as well. This largely explains why the average "aromatic cascara" is only about one-half as active as Cascara Evacuant.

Treatment of Old Suppurating Wounds-One of the most annoying conditions which the practitioner must contend with are old suppurating wounds. A plan of treatment that has proven of success with many of these cases is the employment of Ecthol (Battle). This agent possesses distinct germicidal and healing properties and should be used in those cases which hang on and prove refractory to ordinary methods. With warm sterile water the wound should be well cleansed. If a sinus is present, inject Ecthol into it and then pack with gauze saturated with Ecthol. If no sinus is present, this saturated gauze should be laid upon the suppurating surface. Once or twice during the day pour on a fresh supply of Ecthol. Under this treatment, suppuration is reduced and the wound takes on a cleaner appearance. In a considerable percentage of cases progressive repair of the wound takes place.

Free lodine in Influenza and Pneumonia - The value of iodine in a free state as a combatant of toxins, was never more forcibly demonstrated than in the previous epidemic of influenza and pneumonia. To increase cell and glandular activity and raise the resistance of the body, thus bringing about the elimination of urates, oxalates and chlorates, is the end to be sought. For this purpose Burnham's Soluble Iodine is the ideal product, as it can safely be given in such doses as may be necessary to accomplish this result. Its powerful stimulating action upon the cells and glands, in neutralizing and eliminating toxins, through increasing the resistance of the body, is well recognized. It has been the practice of the most successful users in this field to start at once with 30 to 40 drop doses every 2 to 4 hours, either internally or hypodermically. The latter method is only recommended in the more severe cases, especially where complicated with puenmonia, and in puerperal fever,

septicemia, etc., and when so given, should be injected full strength deep in the gluteal muscles. Hundreds of cases have been reported treated by this method, with prompt recovery, the respiration, pulse and temperature showing marked improvement after several doses. When sufficient dosage is given to produce the necessary anti-toxic effect, prompt and decisive benefit and speedy recovery may be expected. Write the Burnham Soluble Iodine Co., of Auburndale, Mass., for late literature.

Appendicitis and Major Surgery—The most important use to which Campho-Phenique can be put is in connection with surgical operations of all kinds. Its powerful antiseptic and germicidal properties gives it especial value in such cases. The more delicate the operation, the more necessary it is to employ an absolutely pure and efficacious antiseptic to insure a proper healing process after the operation is completed. This is the chief reason why Campho-Phenique will always be found at the hand of skilled surgeons in many of the hospitals in this country, and also in all their operations and private practice. It is dependable in any and all cases, from amputations and appendicitis to the superficial operations in minor surgery.

The frightful increase in the price of white paper has given rise to the Utopian dream that there may be a drouth in original spring poetry next month. But we are of those who put no faith in dreams.

In Leg Ulcers, solutions or powders are to be chosen over ointments.

An Old Remedy and a New Name—Glykeron and Glyco-Heroin (Smith) are synonymous appellations, and are now known as such to all dispensing pharmacists. These names may be used interchangeably by the physician when prescribing what was originally known as Glyco-Heroin (Smith). Glykeron is the more distinctive appellation and affords the physician a greater measure of protection against confusion on the part of the dispensing pharmacist when this preparation is prescribed for cough, bronchitis, pneumonia, phthisis, whooping cough, and kindred affections of the respiratory system.

The Armour Laboratory has in operation what is said to be the greatest sterilizing apparatus in the world for the exclusive use of medical and surgical products. Any desired temperature may be obtained in the automatically regulated chambers. cording thermometers keep records of the temperature during the process of the sterilization. There is no guess work as to the accuracy of the individual in charge of the sterilization plant. The charts of the recording thermometers tell the story. These excellent facilities make it possible to sterilize thousands of gross of ligatures at the same time and thus obtain a product of perfect uniformity and absolute sterility. Armour and Company are equipped to supply ligatures in large quantities and have gone to great expense to ensure perfection of the product sold under the Armour label.

Personality is that quality which makes a man lovable in spite of his cussedness.

Laugh and the world laughs with you; sneeze and you find yourself alone.



A CLINICAL LABORATORY

THAT RENDERS A REAL SERVICE

The BEEBE LABORATORIES, Inc.,

have opened a well equipped Clinical Laboratory in the Argyle Bldg., KANSAS CITY, MO.

Your inquiries will receive prompt, personal attention.

Specimens reported the day received.

BEEBE LABORATORIES, Inc.

ARGYLE BLDG., KANSAS CITY, MO.

DEDICATION

Lady, the world is old, and we are young.

The world is old tonight and full of tears

And tumbled dreams, and all its songs are sung,

And echoes rise no more from the tombed years.

Lady, the world is old, but we are young.

Once only shines the mellow moon so fair;
One speck of Time is Love's Eternity.
Once only can the stars so light your hair,
And the night make your eyes my psaltery.
Lady, the world is old. Love still is young.

Let us take hand ere the swift moment end.

My heart is but a lamp to light your way,

My song your counselor, my love your friend,

Your soul the shrine whereat I kneel and pray.

Lady, the world grows old. Let us be young.

-Thomas Burke, "Out and About London" (Henry

Holt & Co.)

WHERE THE WEST BEGINS

Out where the smile dwells a little longer, Where friendship's grasp is a trifle stronger, That's where the West begins.

Out where the sun shines a little brighter, Where the snows that fall are a trifle whiter, And the bond of home ties are a wee bit tighter, That's where the West begins.

Out where the skies are a litle bluer, Where friendship ties are a trifle truer, Where there's music in every streamlet flowing, Where there's more of reaping, less of sowing, That's where the West begins. Out where the world is still in the making, Where fewer hearts with despair are breaking, Where there's more of singing, less of sighing, Where there's more of giving, less of buying, Where a man makes friends without half trying, That's where the West begins.

SONNET

If I had ridden horses in the lists,
Fought wars, gone pilgrimage to fabled lands,
Seen Pharoah's drinking cups of amethysts,
Held dead queens' secret jewels in my hands—
I would have laid my triumphs at your feet,
And worn with no ignoble pride my scars,
But I can only offer you, my sweet,
The songs I made on many a night of stars.

Yet have I worshiped honor, loving you;
Your graciousness and gentle courtesy,
With ringing and romantic trumpets blew
A mighty music through the heart of me—
A joy as cleansing as the wind that fills
The open spaces on the sunny hills.
—Theodore Maynard in the Living Age.

A PLEA

By Edgar A. Guest

Let me remember through the day To play the friend whene'er I may; Let me be glad that I can bear My portion of life's round of care; Let me in honor earn the right To rest in sweet content at night.

↑ NNOUNCING:

The opening of a new branch at

718 FELIX ST. (Second Floor) ST. JOSEPH, MO.

Fully equipped to give individual attention to your prescriptions and surgical instrument orders.

MERRY OPTICAL COMPANY

KANSAS CITY, MO.

ANNOUNCEMENTS

The American Medical Association meets in New Orleans April 26-30. Headquarters Hotel Grunewald.

"Do Not Throw Away Your Old Instruments" is the caption of an interesting page in this issue (see page 12).

Drs. A. W. McAllister and Woodson Moss of Columbia have been elected honorary members of the Boone County Medical Society.

The National Tuberculosis Association will meet in St. Louis, April 22-24, under the presidency of Dr. G. C. Vaughan of Ann Arbor, Mich.

Dr. G. C. Robinson has resigned as dean of Washington University Medical School to accept a similar position in Vanderbilt University, Nashville.

For Goitre—Doctor, you should try the special goitre tablets put up by the Columbus Pharmacal Co., Columbus, O. One trial will convince you. See announcement in this issue.

The Missouri State Medical Association meets at the State House, Jefferson City, April 6-8. The House of Delegates and the Scientific Assembly will hold sessions simultaneously on the first day.

Mr. Joseph M. Flannery, of Pittsburgh, Pa., for many years at the head of the Standard Chemical Company, died last month. This company was the pioneer in producing radium for professional use.

Sir Auckland Geddes, the newly appointed British Ambassador to the United States, is a physician who was graduated from the University of Edinburg in 1903. In 1913 Dr. Geddes was professor of anatomy at McGill University, until he entered the military service.

MY EASTER MESSAGE

The waking earth with its renewal of life, with its promise and expectation, has brought a message to my heart that I am fain to share with you. Not that it was intended for my ears alone, or that you may not have heard it for yourself, but we all find things sweeter for the telling, and joy itself is doubled by dividing it. And so, as the old earth, weary of winter and the memories of yesteryear, is renewing itself, forgetting the past, looking forward to the future, healing old griefs, burying old hates, forgetting old failures—I hear a call within my own heart to new life, new love, new service. And since companionship is the chiefest pleasure of all journeyings, why may we not go hand in hand upon this happy quest?

Golden Opportunities BARGAINS FOR YOU

Listen, Doctor—If your car is giving you trouble during this changeable weather, it is your carburetor, no doubt. Why not end all your troubles by installing a "Zenith?" The doctors are all doing it.

New Sex Book—A practical, common sense, plainspoken little book on the sexual functions, by Mary Ware Dennett. Price, 25c, postpaid. Address Book Department, Medical Herald, Kansas City, Mo.

Bathing Giris—Just out. Pretty, modest and fascinating pictures for the doctor's sanctum. Fifty cents each; five pictures, all different poses, for \$2.00. Address Art Department The Medical Herald, Kansas City, Mo.

Wanted, Location.—A practicing physician wants to locate in Missouri. Small railroad town preferred. Would purchase a few acres of improved land. Address, F. C. E. care of the Medical Herald, Ridge Building, Kansas City, Mo.

Bargains in Electrical Appartus—Victor No. 1, complete D. C. with stand, \$100. One Kelly Koett, 8 K. W. Transformer. American Tube Stand and Coolidge Equipment like new, big sacrifice. Terms if desired. Address "Electric," Medical Herald, Kansas City, Mo.

Want to Buy a Chair or Electrical Equipment?—Doctor, have you something to sell or exchange? Do you want a location or an assistant? Are you looking for new opportunities? Use and read this column. Ads two cents a word. Remittance should accompany order. Address Bargain Department Column, The Medical Herald.

Doctor, if you receive a copy of the Medical Herald and are not a subscriber, please take it as a cordial invitation to remit a dollar and receive our magazine for the year 1920. Turn to advertising page 68 and note the feast of "Good Things To Come" in the early issues of the Medical Herald.

"Poems the Doctor Should Know," 16 pages, 45 poems of war, love and patriotism, including the immortal poem, "In Flanders' Fields," by McCrae, and several answers to its challenge. Price, 10 cents a copy, three for 25 cents. The Medical Herald, Ridge Building, Kansas City, Mo.



The Medical Herald

and Electro-Therapist

The Kansas City Medical Index-Lancet

An Independent Monthly Magnatus

Vol. XXXIX.

APRIL 15, 1920

No. 4



A MORALITY WHICH IS MORAL: A CRITICISM OF A CRITICISM

VIRGINIA LE ROY, Streator, Ill.

The debate between Dr. Edith H. Hooker and Dr. William J. Robinson on Venereal Prophylaxis and Prostitution which was published originally in the "Arbitrator" and republished in the December "Critic and Guide," offers plenty of material to illustrate the fact that superstition, bigotry, and negative values are still trying to function in a world which needs red-blooded, vital, affirmative concepts.

The subject matter as frankly designated would seem to call for a dispassionate, scientific analysis of the efficacy of venereal prophylaxis in eliminating the worst elements in prostitution which menace our public health. Dr. Robinson is clearly within his rights as a scientist and physician when he calls Dr. Hooker to account for having muddled two aspects of the problem, the ethical and the scientific, with the usual result of doing justice to neither.

And so far as a layman can judge he has presented a clear, strong case for venereal prophylaxis in its power to eliminate disease. if used intelligently and conscientiously, and has submitted valuable statistics of recent nature to prove his contention. Which is what he purposed to do. But it is not with this technical aspect of the problem I am so much concerned, since only further statistics and further advances in its propaganda and application can prove beyond peradventure of a doubt it will be to the world all its most ardent advocates claim for it. Enough has been accomplished to prove its possibilities, and that is all that science requires in order to further develop its resources.

The interesting phase of this debate, and more exactly the criticism which Dr. Robinson offers of Dr. Hooker's propositions, interest me because his criticism of her position did not go far

enough—did not pierce the real heart of her fallacy. The real criticism of her propositions, as I see them, is that she neither proposed a real ethic nor a real scientific thesis. And I want to add further that in my opinion if she had outlined a real ethic, there would have been nothing confusing in the result, but rather it would have proved a clarifying solvent, and a convincing justification of all the fruits of science so far attained. The trouble with this age is that science has plunged ahead in the great adventure of mastering life's problems, while ethics and religion are still floundering amid the unrealities of myth and fetish, knocking down giants of straw, with nothing to offer but musty platitudes. Until there is a sound, fruitful and inspiring ethic, supplementing a fearless science, there will be no rational, working concepts with which the average human soul can adequately envisage his universe and his relation to it. The day has gone by when we can, like the celebrated French Bishop, close the door of our oratory when we enter the door of our laboratory.

Most of our moral and ethical codes have been negations of life, have taken on unwarranted sanction as ends in themselves, and instead of furthering and enriching life, which is their only justification at all, and the test of their validity, they have operated to impoverish the very sources of life, dilute its splendid possibilities, and have so narrowed their scope of influence as to almost nullify any vital result. Referring to the morality of a person usually means, has he refrained from any kind of illicit sexual contact. The whole wide range of relationships and experiences remains practically ignored and even regarding this most vital relation of the sexes, only negative precepts are formulated.

There is no such thing as a code of ethics which is more than merely a passing means to a more glorious fulfillment of life. It is good for nothing unless it is good for more life. Unless it liberates more beauty and power in human souls, it is a curse. Unless it interprets life in big affirmations, big and elastic as life itself, unless it calls freely on all science to perfect a

technique which shall utilize every ounce of power, which shall recognize every element in its positive value, which shall conserve every nuance of emotional beauty, in the realization of those great ideals which are rooted deep in our nature, it is both futile and dangerous.

Sex power is the dynamo which runs the world; it creates children of flesh and children of lights; its ecstacies are the stuff out of which immortal melodies are sung, great pictures painted, cold marble etched with beauty; its flaming passion keeps the sluggish pulse of life athrill; its generous ardors warm the heart of the world and keeps us kind; its rich fulfillments caress each sordid fact with glamour, until living takes on new meaning and new purpose. To have never known the ecstacy of surrender is to have never known the peace of fulfillment, and that peace is the germinating soil for all the great achievements of life. It is the divine miracle of resurgent life, its potencies boundless.

We have taken this power for granted and studied only its perversions. That is why we suffer today from a prurient consciousness which issues the mandates in terms of denial and forges only fetters of repression, poisoning the source of supply, starving the heart and stultifying the mind of mankind.

Inferentially you gather from Dr. Hooker's articles that she conceives of sex power only in terms of children born in wedlock; she calls any other experience of the sexual relation "antisocial on a par with other criminal acts of mur-der and theft." She decries any value of preventive relief from disease in commercial prostitution as a challenge for the whole world to indulge with impunity in sexual promiscuity, and would change the emphasis from prophylaxis to continence. She believes that with the proper legislation in a few years we would so have curbed our excess sexual desires, they would instinctively flow through the proper grooves of conventional marital expression and we would have what she and her kind would term a moral universe. This would mean the single standard for both sexes since the male born and trained under these restraints would be as amenable to this ideal as the woman.

The basic assumption underlying this conception is that conduct so regulated would result in a healthy and happy human race. But would it? Tradition, custom and the unwritten law have relegated women to this realm of circumscribed sexual experience and the tragedies of a debased, perverted and starved womanhood; her generous over-flowing stream of sexual potency, intended to enrich her life and the world about her, dammed up at its source, reacting as dangerous poisons, rendering her not only sterile as to offspring, but sterile as to emotional power

and mental penetration, a creature of dangerous neurosis, of morbid humors, of insatiate thirst for meretricious excitements, the kind that fill the sanatoriums, the clinics, the waiting rooms of doctors' offices, who form that steadily growing class of female perverts who either flame up some time in life, or dry up ugly and futile, is part of the recoil.

There are countless women who obey rigidly the letter of the ten commandments, who violate every healthy instinct of their bodies and deny every glowing aspiration of their hearts and souls. We may well ask, are men made for morals or morals for men? If we regard man as the law-giving animal, the imposer of restraint upon his own appetites and passions for the greater welfare of his kind, we can at once test the validity of all moral systems.

In the first place you cannot regulate anything intelligently and effectually until you know something of the thing you intend to regulate.

All we know of sex power is that it is the miracle of unfolding life, that its potencies are wondrous, its possibilities infinite. It is the plus of life and the more we have of it, the more of life we have, both physical and spiritual. Therefore our duty and privilege toward it is all in the line of conservation, how to extract all of its rich potencies for the glory of mankind. ethics should be expressed affirmatively, and every regulation should be tested by its power to increase the beauty and power of sex consciousness; every regulation which reacts to impoverish its functions, to degrade its noble mission in life, should be repudiated as inimical to the health, sanity and spiritual growth of human beings.

Virtue as a negative proposition, commanding people not to do things, is a relic of the old superstition and dogmatism of bygone ages when everything conceived by the human mind was rigid and its finality unquestioned. Whatever the new virtue is it will be affirmative, telling people what to do, and how to do it. This takes brains, whereas the other only involves a reflex of the spinal column.

Sex power would never have been the commanding and irrisistible urge which it is, had its purpose not been transcendant in character. It is our business to affirm its glory and discipline its manifestations through constructive programmes which liberate its power while directing its embodiment. Many forces are going to contribute to the liberation of sex power and its rational expression, but of one thing we are certain. The old conspiracy of silence is criminal; the old notion that even its legalized relationship in marriage is more or less a vulgar concession to the need of populating the earth is debasing; the whole puritanical revolt against the beauty and sanctity of the human body and its normal pas-

sions is an infidelity against the inviolable dignity of the human race and its emergencies from the slime of protoplasmic life to the creative genius of a Shakespeare.

Out into the byways, the alleys, the cess pools of vice and the abyssmal regions of dense ignorance, the search light of a pitiless publicity must probe the festering sores, using the prophylaxis of scientific prevention, as well as the relentless logic of a new conception of sex indulgence, but this is only part of the new attitude. Out from the schools, the churches, the public forums, the social centers, the daily gatherings of people must go these affirmations of the integrity of their passional life, how it can be conserved, how disciplined, how made more beautiful, more sane, more in consonance with their highest purpose.

The world is ripe for a new ethic, and a full technique for realizing it, based on all that science can recommend. There should result no human being so insignificant who should not catch early in life some of the splendor of love and its sanity before he is smeared over with the slime of ignorant and bestial minds. It is mankind's only salvation to exalt sex power, use it intelligently and create out of its fervid passions as well as its mellow afterglow, the beauty which transforms the world.

The monogamic ideal is glorious to approximate toward, but it cannot be an ultimatum for all flesh. And so much of its beauty and truth as mankind may attain unto will come through enlightenment, a constructive attitude and a sublimation of love's meaning.

Commercialized prostitution will cease when the starved heart of man is fed from the manna of ennobling love and passion, but it will never be legislated out of commission. When the halfgods go, the gods arrive. We may have to enlarge our conceptions of the part love and passion play in life and formulate our conventions in accordance. We may have to remove the angel with the flaming sword from the gate of Paradise and bid the sons of men to enter therein, for it is not until we have eaten both of the tree of good and evil that we know where blessedness lies.

Dr. Hooker's argument is weak, not because she mixed ethics and science, but because she used neither in her propositions. A constructive ethics is the basis of a sound science, neither can function properly without the other. Could Dr. Hooker have indicated the rational and all-inclusive principles of an ethic commensurate with life's needs, she would have rooted deep the eternal values and offered a convincing justification for all the scientific preventives which are useful in protecting our shallow infidelities from their greatest blight, while preparing our hearts and minds for the ultimate miracle of sex regeneration.

LUETIC CEREBRO-SPINAL MENINGITIS* (CASE REPORT)

JOHN W. SHUMAN, M. D., F. A. C. P., Sioux City, Ia.

In many cases of cerebro-spinal syphilis we can but suspect the nature of the disease from the history and physical findings and we must rely upon the laboratory findings for a correct diagnosis. This is extremely true in those instances in which we do not have the so-called "pathognomonic signs"—the Argile Robinson pupil, the unequal pupil, alterations in station, gait, reflexes, etc., to aid us. The diagnosis of cerebro-spinal meningitis is not easy for many cases of epilepsy, headache, neuritis and neurasthenia really are caused by the pale spirillum of lues and go unrecognized until even as late as post mortem before anything like a correct diagnosis is made.

Wolley (Penn. Med. Jour., Feb. 15) of Pittsburgh, states that every syphilitic with cerebrospinal envolvement is a candidate for tabes or paresis. May be so, but not all who electioneer are elected. For example, the case I am about to report. Isolated case reports are generally to be condemned, but I offer this as an exception to the rule, for this case offers several points of interest: (1) The difficult differential dignosis. (2) The treatment. (3) Quick recovery. (4) Lasting cure.

Case Report

W. D. Male, aet 35, a farmer, was examined at his home, March 30th, 1914. The family history was negative except that of one brother whose death was due to pulmonary tuberculosis at the age of 20 and with whom the patient had lived. The patient had been married three years, the wife impregnated twice, results: two healthy and robust children, who showed no stigmata of degeneration.

Personal history: No direct history could be obtained as he was in a semi-comatose condition. His wife stated that "about three weeks previous (March 7th) he had complained of dizziness and severe consituation and had vomited twice without being sick at the stomach and these symptoms had continued until the family physician was called four days later." Two weeks later (March 21) he suffered a similar attack, which continued to the date of consultation. He had been vomiting every day without nausea and gradually growing more stupid, the day prior to my visit he fell toward the right and since then had not attempted to stand.

Physical Examination: He lay upon his left side and was aroused with difficulty. The pupils were equal and reacted to light. There was slight cervical and marked spinal rigidity. Brudzinski's and Kernig's signs, and ankle clonus were positive. The knee-jerks were increased. Tempera-

*Read before the Medical Society of the Missouri Valley, Des Moines, Iowa, September 18, 1919.

ture (per axilla) 100 degrees F., pulse 80, respiration 17, blood pressure, systolic 135, diastolic 90 mm. hg. The diagnosis of cerebro-spinal meningitis due to low grade type of infecting microorganisms, 1st (Tbs(?), 2nd (Lues(?), 3rd (???), was made and the patient taken to the St. Vincent hospital in Sioux City, where the following data was obtained.

Urinalysis (catherized specimen) dark amber, cloudy, alkaline, 1018, albumin and sugar negative. Phosphates in excess. Microscopic nega-

tive.

Hemanalysis, W. B. C. 20,000 (which changed our opinion in reference to tuberculosis), R. B. C. 4,800,000, Hgb. 80 per cent. Stained smears negative. The leukocytosis made the diagnosis of lues more probable but a negative Wassermann by W. G. Rowley, M. D., upon the blood upset this logic; nevertheless a half grain of bichloride of mercury (saturated solution of bichloride in normal saline solution so that each 15 minims of the solution carries ¼ grain of bichloride of mercury) was injected into the deep muscles of the buttock that evening immediately after spinal paracentesis with the idea that if we were dealing with a tubercular meningitis the mercury could do no harm, and if it was luetic we might do some good.

Spinal puncture was easily performed, the fluid ran freely (pressure not taken). Twenty c.c. of clear fluid was withdrawn, which gave a cell count of 60, and reduced Fehlings solution, this aided the diagnosis and when a positive Wassermann from the spinal fluid was reported by Dr. Rowley the next day the diagnosis of luetic cerebro-spinal meningitis was a certainty.

Detail of Treatment
Midnight, March 30th, the rectal temperature
was 100.4, pulse 89, respiration 20; patient sleep-

ing.

March 31st, temperature at 4 p. m. 98, pulse 82, respiration 18. White blood cells numbered 11,600. Voided twelve ounces of urine during the night. Vomited once at 9 a. m. He was still drowsy, but put out his tongue when requested and answered questions in monosyllables. Liquids were taken more freely. Bichloride of mercury 1/4 gr. injected into the left buttock. Eye examination by Dr. Gco. Park as follows: Media clear, fundi negative.

April 1st, W. B. C. 10,000. Fairly rational, but memory and orientation poor. Kernig and ankle clonus absent. K. J. normal. Some abdominal distress complained of (saline cathartic?). Hg. Cl grain, ¼ injected right buttock,

former site avoided.

April 2. On back rest. Mental condition greatly improved. Hg. Cl₂ grain ½ injected. Ditto for the 3d, 4th and 5th. During the night of the 5th bloody and mucous stools observed (bichloride poisening). Hg. Cl₂ omitted and

the next day stools were normal. On the 7th Hg. Cl₂ ½ grain injected. The 8th a drachm of mercury (ungt. hydraag 50 per cent U. S. P.) was rubbed into the right axilla. The 9th ¼ grain Hg. Cl₂ was injected and the 10th a drachm was rubbed into the left axilla and a ¼ grain Hg. Cl₂ injected, on this date he was clearer mentally than at any other time since he had been admitted, he recognized his wife and asked for his children. He also remembered the date and manner of his contagion "six years before a chancer on the lower lip, treated internally until 'cured' then stopped treatment."

April 12, treatment was suspended on account of another attack of muco-colitis (mercural) He was allowed to be up, he could not stand alone and was still very slow mentally. The 14th he walked with aid of a cane. The 20th he walked to my office (four blocks). His weight was 129½ lbs. Ate and slept well, station, gait and reflexes normal. The 22nd weight 132½ lbs. Another course of bichloride of mercury started. The following data shows the increase in weight and the amount of bichloride used before full tolerance was met.

4-27-1914, wt. 133½ lbs., Hg. C₁₂¼ gr. injected 4-29-1914, wt. 135 lbs., Hg. C₁₂¼ gr. injected 5- 1-1914, wt. 137 lbs. Hg. C₁₂¼ gr. injected 5- 2-1914, wt. 136 lbs., Hg. C₁₂¼ gr. injected

5-4-1914, diarrhoea—treatment omitted and sent to his home. Three weeks later, May 22, his weight was 13934 lbs. Station, gait, and reflexes normal. Urine negative. One month later weight 145½ lbs., complaining none and "working in the field every day." One month later weight 146½ lbs., and his condition normal. The man is well at the reading of this proof, 3-24-20.

Briefly the case teaches:

- 1. That spinal fluid analysis is demanded in this class of cases.
- 2. That mercury did perform a cure. Frances building.

A nickel continues to be five cents, but it will not begin to buy what it once did. A shoe shine that cost a nickel now is a dime. An apple, an orange or a sack of peanuts that formerly sold for five cents now costs 10 and 15 cents. A package of gum that sold for a nickel can still be bought for the same price, but quality and quantity are not guaranteed. About the only thing that a nickel or its multiple will buy now at the same price it would before the war is postage. Two cents will buy as much postage as it ever did and the letter will go just as far, but a nickel will hardly go anywhere any more without a penny, or two pennies, or even three of them to keep it company.



"We are sifting out the selfishness that marred us in the past,

For the light of truth is shining through the clouds of doubt at last,

We are building for the future to a larger, better plan.

For all eyes have caught the vision of the brotherhood of man."

A sunny temper gilds the edge of life's blackest cloud.—Guthrie.

The lot assigned to every man is suited to him, and suits him to itself.—Marcus Aurelius.

The old lady, after receiving her interstitial gland, looked like a young woman, and flirted. What is sauce for the gander is sauce for the goose.

"What is a dual personality?" "O, that's what a chap and a girl discover that each has after being married a week or so."—Boston Globe.

It is a noble thing when a man grows old retaining something of youthful freshness and fervor. It is a fine thing to ripen without shriveling, to reach the calmness of age, yet keep the warm heart and ready sympathy of youth.—Boyd.

Nadal reports a case of rousing of inherited syphilis in a case of measles at 4, the inherited syphilis flared up in the form of cerebral hemiplegia. In another case a mild nephritis started a train of cerebral symptoms with coma for 12 hours. Simple infection sore throat in another case roused an encephalitis with meningeal reaction.

Thirty-six seems young by comparison with men of great age like me, yet it's some way through life for all that, and the mere fools and fiddlers are beginning to grow weary and look old. Yes, sir, by 6 and 30, if a man be a follower of God's laws he should have made himself a home and a good name to live by and his works, as the world says, should begin to follow him.—Robert Louis Stevenson.

Malingering, simulation, means feigning illness. The malingerer must be conscious, there is no subconscious malingerer.

Nothing resembles malingering more than hysteria.

Llewelyn says all hysterical manifestations are of the nature of unconscious psychical reactions. Just as voluntary acts are conscious psychical reactions.

Therapeutic Truisms

Unhealthy wounds; dress with chloral hydrate, two per cent solution.

Oil of anise applied to infected parts is sure death to lice and other parasites; hence it cures itch.

For exophthalmic goitre, amyl nitrite, daily inhalations, five minutes at a time, is said to cure in a few weeks.

In opium poisoning, ply the patient with repeated draughts of strong coffee, hot; also keep up unremitting muscular exercise.

Hernia, even strangulated, drink strong coffee, cupful after cupful, and bathe the rupture with the same; presently gas will escape and the tumor vanish.

Hydrochlorate of cocaine, four per cent solution in distilled water, used as a local application in diphtheria relieved the pain and dissolved the false membrane.

Carbonate of ammonia is an excellent remedy for delirium in any fever. A glorious remedy for headache, hives, internal hemorrhages, pneumonia of old people.

Ground coffee, sprinkled upon live coals in a shovel, and carried around in a room will, in a few minutes, clear the atmosphere of all impurities, especially of animal effluvia.

Ethereal menthol solution, ten to fifty per cent, applied with a camel hair brush for boils, carbuncles and inflammatory gatherings is excellent and cures itching eruptions.

Iodide of arsenic is excellent for hay fever, rose cold, inveterate skin diseases, chronic catarrh of the nose, malarial subjects with running ears, enlarged tonsils, and puffy eyelids.

Minute doses of creosote is claimed the specific remedy for syphilis of infants, and "all the troubles of teething." The same is a leading remedy for offensive leucorrhea and offensive lochia.

Sabina tincture, ten-drop doses in water, is a safe and certain remedy for amenorrhea, and in five-drop doses, equally good for menorrhagia; the same is excellent for chronic gout and rheumatic stiffness of the joints.

For colic give aromatic spirits of ammonia, official dose, in sweetened water, every twenty minutes. For colic of baby, give two to four drops in milk; this is said to give more speedy relief than any other remedy.

Continuing "The Medical Fortnightly and Laboratory News."

The Medical Herald

and Electro-Therapist

Incorporating the

Kansas City Medical Index-Lancet

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Vol. XXXIX

APRIL 15, 1920

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Electro-Therapeutic Week in Kansas City

It is estimated that upwards of 20,000 physicians within the boundaries of the United States are making use of electricity as a diagnostic and therapeutic agent, many of whom have in their possession some form of apparatus, x-ray or high frequency. Owing to the fact, however, that very few medical colleges include electro-therapeutics in their curriculum, little opportunity has been given to medical men to familiarize themselves with the modern method of its application, and they therefore fail in securing results, because the proper instruction is not available. We take pleasure, therefore, in calling the attention of our readers who are interested in electro-therapy, to the course of lectures to be given in Kansas City during the week of May 24, by Dr. B. B Grover of Colorado Springs. Outline of program will be found in another part of this issue. Dr. Grover spent a week in Kansas City last summer and delivered his first course of lectures to a very appreciative class. His return to Kansas City is the result of a very urgent request on the part of those who had the pleasure of hearing his lectures last year. Dr. Grover is not only one of the best posted men in electrotherapy, but he possesses the happy faculty of being able to place his information before the student in a way which is easily comprehended.

In this connection, we would also call attention to the meeting of the Western Electro-Therapeutic Association, which was formed in Kansas City last May. The annual meeting will be held May 27-28, immediately following Dr. Grover's course of lectures. This association has been formed for the purpose of cultivating and promoting knowledge in whatever relates to the application of electricity in medicine and surgery. A special feature of interest to those who attend this meeting will be a demonstration in the technique of the treatment of tuberculosis, given by Dr. Jefferson D. Gibson of Denver, who is recognized as an authority on this subject. Those who wish to take advantage of Dr. Grover's post graduate course should register without delay as the class will necessarily be limited. All sessions will be held at the "Little Theatre," Troost Avenue and Linwood Boulevard. Arrangements are being made for an interesting clinic to be held at the General Hospital; and last but not least, there will be an elaborate display of electro-therapeutic and x-ray machines and apparatus, probably the best display of this kind ever seen in Kansas City.

Skill in Electro-Therapeutics

It is more or less believed by medical men and encouraged by certain manufacturers of electro-therapeutic apparatus, that the application of electric currents is a simple matter and can be learned in a few hours and that no trained skill nor experience is necessary to read a radiograph or operate any electro-therapeutic modality. It is now well known that as result of x-ray work being carried out by unskilled operators there have been burns inflicted upon many patients and also operators have been burnt. It is now, after 25 years, generally accepted that one should be well trained before undertaking radiography. While there can be no objection to assistants being allowed to administer electrical treatments to patients, it is absurd to leave the initiative to untrained minds.

In order to practice medicine successfully a physician must be possessed of a thorough knowledge of its groundwork, anatomy, physiology, pathology, chemistry, biology, bacteriology, laboratory methods, materia medica and therapeutics. He must also have that training necessary to give him a keen perception and ability to recognize pathological conditions. He must have good judgment and good technic. In order to practice electro-therapy successfully one must have all the knowledge possessed by the medical man and in addition thereto a thorough understanding of the fundamentals of electric currents, how they are produced, their physio-

logical action and how to apply them.

Electricity is a remedy of the most potent character either for good or harm. Its wide range of applicability, its vitalizing and stimulating force to every cell of the human body make it a resourceful agent in medicine. The results of therapeutic value from any electric modality are in direct ratio to the skill of the operator. The harm from the unskilled operation of these modalities emphasizes the necessity of a course of instruction to all who contemplate their use.

The indications for electricity in medicine are usually more definite than those of drugs, but it is as easy to make a misapplication of electricity

as it is to administer the wrong drug.

No one would seriously contemplate the practice of medicine and surgery solely upon the information furnished by manufacturers of proprietary medicines and surgical instruments. neither should one undertake the practice of electro-therapeutics equipped with only the instructions furnished by the manufacturers of electro-therapeutic apparatus.

No one contemplating electro-therapy should spare any means to become informed in the fundamentals of electric currents as well as their physiological effects and therapeutic indications.

Conserve the Vitamines

Our knowledge of the vitamines, however imperfect it may be, necessitates some change in our culinary activities. Just what the definition of a vitamine is as a distinct chemical entity, we do not know any more perfectly than we know electricity. We are acquainted with the good influence of the presence of the vitamines and with the ill results of the lack of these principles. We know of a water soluble vitamine which occurs in cereals and the leaf of vegetation and in the body of vegetable foods, also with a fat soluble one occurring chiefly in butter. Life and nutrition are favorably influenced by these bodies, hence a new point of view regarding nutrition. Butter acquires particular value as a food stuff over all of its imitations, no matter how clean, sweet and pure these fats may be. This applies specially to growing children.

Again in the preparation of our vegetableshigh degrees of heat spoil the vitamines—the more vegetables to be eaten uncooked the better, leafy greens, lettuce, celery, cabbage for instance. In boiling those which are by custom thus eaten, the water in which they are boiled should be eaten when possible with the vegetable, or such water used as soup stock. Throwing away such water is therefore a waste and an extravagance. The proverbial thrifty Frenchman who makes soup from pea pods may not be such an idiot after all, and the lusty German who devours vegetable soup daily has then built bet-

ter than he knew. Our garbage can has, according to our recently acquired knowledge, been a large leak in our national vigor. No wonder American hog meat commands a high price, it is worth it, fed on concentrated vitamines.

Slowly man learns how to live. I. M. B.

Federal Aid To Soldiers

In almost every community in the United States there is a discharged soldier, sailor, marine, or war nurse, suffering from some injury, or ailment, which dates back to service with the

fighting forces.

Often this injury or ailment has made it hard or impossible for them to fit in where they did formerly. They are handicapped and need help; not charity, but mental and physical reconstruction. In many cases such people unfortunately keep their troubles to themselves. They are reluctant to seek aid or advice, for fear their friends might consider them weak. Possibly you know such a person.

If you do, encourage him to take his troubles to the government. The War Risk Insurance Bureau and the United States Public Health Service are especially anxious to get in touch with such individuals. The Public Health Service has set up a chain of reconstruction bases throughout the country for beneficiaries of the War Risk Bureau. These are not Army hospitals, nor is there Army discipline in connection with them, but rather a system of hospitals similar to the general hospital in large cities except that the treatment is free and goes much further than in the ordinary hospital.

Recreation, vocational training and wholesome entertainment are combined with treatment. While men are being bodily rebuilt they have the opportunity of learning some useful occupation, or pursuing academic studies. They are taught not only to find themselves, but to better their condition. The environment is as

homelike as it is possible to make it.

A great many men who went into the Army have developed tuberculosis and other diseases requiring special treatment. The Public Health Service has separate hospitals and sanatoriums for these patients, where they may get the best treatment known to medical science.

A large number of soldiers are not yet aware that the government offers them free treatment. Please tell them.

Health Insurance? Not

In the February number of Medical Review of Reviews, Dr. A. L. Benedict of Buffalo has given the profession a very comprehensive resume of the baneful influences health insurance

will have upon the doctor's income and professional standing. It has proven very unsatisfactory in Germany. In England it has split the profession and now the state of New York is to face it. The profession must rouse itself if it expects to prevent its spread among the states. It is just one step toward the socialization of medicine. Health insurance will pay the doctor from 81/4 cents to 15 cents per patient for an office visit. Such contracts, if a doctor will see an average of 35 cases a day with a maximum of 50 cases daily, may mean as much as \$3,000 a year. Just how long a doctor is capable of maintaining this gait is not determined. But then, as in contract deals generally the young and J. M. B. vigorous ones are alone considered.

The Height of the Palate in Relation to Adenoids and Chronic Otitis

The large majority of medical men believe the adenoids cause the high V shaped palate and its dire consequences.

Many discussions on this subject have taken place, and at an early date it was noticed that an abnormally high and narrow palate was accompanied by adenoid growths in the nasopharyngeal sac. Prof. Halmagren of Stockholm carried on investigations with the aim of discovering whether any connection could be discovered between the occurrence of chronic otitis and the existence of a high and narrow form of face.

Leptoprosopia is an expression of a general contour of the facial structure of certain individuals, being a relative extension in height, but more especially a narrower form of facegeneral contour that in certain more extreme forms is very noticeable at first sight, is found in 43.5 per cent in the proportions of the face, nasal apertures, and the palate, and in 39.5 per cent either in the facial conditions as regards shape or that of the nasal apertures together with a high narrow palate. The high and narrow palate, hypsistaphlyia, is the thoroughly characteristic indication of the leptoprosopic type. To an extremely high degree adenoid growths occur in company with a high and narrow palate, while the palatal index of heighth and breadth in persons not suffering from any disease of the nose or ear, nor any glandular hyperplasias, on an average is 42.56; the index in cases with adenoid growths is 51.08. About 72 per cent of those having glandular hyperplasias in the nasopharynx showed one or other symptom of or predisposition to diseases of the ear.

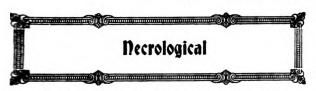
Wright and Smith, in their work on "Diseases of the Nose and Throat," have the following: "Unquestionably the narrow high palatal arch and consequent narrow jaw and compressed nasal alae are associated more frequently with tonsils

and adenoids than the primitive type of ja. It is true one phenomenon is occasionally se 1 without the other, but the frequency of ther association is so striking that coincidence wit out any relation of cause and effect is not a tenable argument. We are driven to conclue that in a general way the one is the sequen e of the other. No mechanism has ever be n demonstrated which has satisfied the reason r escaped the experimental demonstration of is inaccuracy in defending the thesis that the adnoids are the antecedent and the narrow alveol r arch is the consequence in the chain of causatio 1. We believe that all the evidence points the oth r way. Children have adenoids because their paents transmit to them the inheritance of narro v jaws. The parents do not have the narrow javs as an acquired trait, but as an evolutionary on: This we believe to be the chief hereditary factor in the etiology of the occurrence of adenoids and tonsils. We do not assert that it is the chief cause in the etiology, but we confidently believe it accounts for the hereditary factor which carnot be ignored.'

It is, however, rather to environment than to heredity we must look for the most important factor in the etiology. It is to the frequent repetition of congestions of the mucosa of the pharynx that we trace both clinically and pathologically the genesis of lymphoid hypertrophy. Aside from repeated inflammations the lymphoid tissue receives the stimulus to proliferation from the direct impact of imperfectly filtered and moistened air and of secretions of the nasal chambers and their annexed cavities. The latter are as plainly a sequence of a narrow and distorted nasal passage as are the attacks of inflammation of the nasal and pharyngeal mucosa P. I. L.

Regulations for Prescribing Liquors — As stated in Internal Revenue Regulations 60, it is first necessary for practicing physicians to secure a permit to prescribe intoxicating liquors. Application for such a permit must be made on Form 1404, in triplicate, sworn to before a notary public. These blanks can be secured from the federal prohibition director of the state or from the collector of internal revenue of the district in which the physician resides. Permits will be issued only to physicians legally qualified to practice. The three copies when filled out are returned to the federal prohibition director. After receiving a permit to prescribe, the physician is then supplied with Form 1403 on which prescriptions for alcohol and alcoholic liquors must be made out.

Dr. William J. Mayo, Rochester, Minn., and Franklin H. Martin, Chicago, who have been touring South America in the interests of a Pan-American College of Surgeons, have returned.



He lived in a house by the side of the road,
Where a race of men went by—
Men who were good and men who were bad,
And men who doomed to die.
But his heart was big and his sympathy true—
Doing good his greatest life's plan.
He lived in a house by the side of the road,
And he was a friend to man.

Dr. Thomas Estill Holland is dead. Many will read these words with profound sorrow. Dr. Holland was a native Missourian, and though long an honored and beloved physician and citizen of Hot Springs, Ark., he usually attended the meetings of the Missouri State Medical Association, where he was always warmly greeted by his old friends. When Dr. Holland rose to speak in a medical meeting he was assured of earnest



DR. THOMAS ESTILL HOLLAND

attention. His tall, well proportioned figure, his refined and kindly face, his shock of snow-white hair, made him always a conspicuous figure, and when he spoke—while fearless and outspoken in his views—words of wisdom and kindness were always heard.

His only son, Dr. Estill D. Holland, a brilliant and successful young practitioner, preceded his father to the Great Beyond some fifteen months; from the shock of the son's death Dr. Holland never recovered.

Hot Springs has lost its most earnest, faithful worker, in the cause of civic improvement and beauty. Missouri has lost one of her best loved sons. He was born in Platte county, Missouri, seventy years ago, and each year he visited

"up the country" as he called it, among his relatives and old friends.

Dr. Holland was an ex-president and one of the founders of the Medical Association of the Southwest.

Twenty years ago, Dr. Holland moved from St. Louis to Hot Springs, Ark., and became an ardent upbuilder of the city he had chosen, and which he loved. Much has been written of his civic work in Hot Springs and many are the hearts in which his deeds of kindness and helpfulness are written. He is survived by his wife, Mrs. Jeanette D. Holland, to whom the sympathy of the entire medical profession is extended.

The sudden death of Dr. Barton Pitts shocked the people of St. Joseph on March 5, 1920, as he was known to have been about town the previous day. He was one of the most prominent oculists in this part of the country and for thirty years enjoyed a large practice.

Dr. Pitts was born at Norfolk, Va., in 1858, graduated from the Baltimore Medical College in 1881, practiced general medicine for four years and then studied diseases of the eye and ear as a specialty. In 1886 he came to St. Joseph to make his home, and from the beginning he proved to be highly successful-

He was a member of many medical societies, and for 25 years was the oculist of the St. Joseph & Grand Island R. R.

He was married to Miss Edna Steele of this city in 1891, and leaves two sons and a daughter. Dr. Pitts had recently resolved to quit practice and take life in a more quiet manner, after forty years of practice. Unfortunately, his untimely death spoiled his plans.

Dr. Pitts was a very skillful operator, and he was unusually successful in cataract operations. Many years ago he treated large numbers of cases of trachoma in which he proved to be an expert. As a physician he was true to his patients and loyal to his profession.

We regret sincerely his untimely death. The medical profession has lost in him a very valuable member.

P. I. L.

Dr. Ralph W. Connell, who recently died at his home in Omaha, at the age of 62, was health commissioner of the city from 1906 to 1918. The striking features of his public career were his frequent clashes with individuals and groups over his strict interpretation of health regulations, and absolute insistence that they be obeyed. He was a firm believer in vaccination for smallpox exposure, and met with much difficulty in this regard. He inaugurated the score card system of checking dairies, and under his supervision the milk supply of Omaha was raised, as borne out by government reports, from the

poorest quality of milk to the best found in any city in the country. In other words, Omaha's record on milk supply was the highest of any city at the time Dr. Connell left his office as health commissioner, with the resulting lowest infant mortality death rate of any city of Omaha's size in the country. He further raised quarantine regulations to high standard, and worked out and inaugurated a plan for inspection of meats handled by independent packers. In the line of dairy supervision he inaugurated the annual inspection of milk cows for tuberculosis, with condemnation of those found infected, and it was due to his efforts that the dairies took up the system of pasteurization.

Dr. Hugo Wm. Wightman, inventor of smokeless powder and at one time professor of anatomy and surgery at Creighton Medical College, Omaha, died of sleeping sickness, following influenza, at the age of 47.

An Institution of Merit—In these days of reconstruction, when everybody is endeavoring to adjust himself to changed conditions, the practitioner of medicine is quite often compelled to postpone attention to his chronic cases in order to devote the time and care demanded by the acute diseases. One result of this condition is that many chronic cases drift into the hands of magnetic healers, Christian scientists and osteopaths. A majority of these cases could be kept away from the charlatans if the physicians had knowledge of an institution such as our readers will find in the advertising pages of this issue. The Blomqvist Gymnastic and Orthopedic Institute is conducted in harmony with the ethics of the regular profession and stands high among the best known physicians and surgeons in Kansas City. When you have a chronic case which needs massage, orthopedic gymnastics or Swedish movements, refer them to the Blomqvist institution, where every instruction will be carried out with conscientious care. The patient remains yours and you lose no prestige or control while he is under our treatment at this institution. Our readers are cordially urged to visit the institution at any time and correspondence will be promptly attended to.

Next meeting of State Society in St. Joseph—As the Herald goes to press, a wire announces that the Missouri State Medical Association, in session at Jefferson City, had selected St. Joseph as the meeting place for its 1920 meeting. Dr. J. W. Ferguson, of Sedalia, was elected president, by acclamation; delegate to A. M. A., Dr. C. R. Woodson; councilor, second district, Dr. O. C. Gebhart.



In ulcer cases constant pain, repeated hemorrhage or evidence of stenosis calls for surgery.

Blood as a laboratory finding may disappear, when ulcer blends into sclerosis or malignancy.

Intermittent dyspepsia quieted by alkaline compounds is suggestive of gastric ulcer, even without blood.

Almost any case of ulcer may be maintained comfortably on a diet of baby food, while regular meal hurts.

Admiral Peary, who died of pernicious anemia had 35 transfusions which no doubt prolonged life, but were not sufficient to rest an exhausted bone marrow function.

Gall bladder disturbance shows itself not so much because of obstruction or stenosis, but because of absorption of toxins and interference with pancreatic digestion.

Gastric dilatation following ulcer, even if apparently cured, or arrested means complications such as sclerosis, pyloric obstruction, adhesions, perigastric or other mechanical condition.

A microscopic analysis of the stool, after several days of Schmit-Aarons diet regarding undigested percentage of protein and starch is more valuable in diagnosis of pancreatitis anemia than any laboratory findings.

Continuous symptoms, especially in those over 40, means not so much an extension of the ulcer as it does complications, such as advancing sclerosis, stenosis, malignancy—that is, extension into deep structures and not of the mucous membrane.

Pancreatitis must be thought of in bilious attacks. The liver has a wide range of resistance before symptoms from that source present themselves. Loss of weight and painless jaundice of themselves suggest of pancreatitis particularly if urine nitrogen is decreased and fecal nitrogen increased.

According to Smithies, the achylia of pernicious anemia is an early symptom and must be overcome by large repeated doses of dilute hydrochloric acid, but the essential point is to search for and remove any focus of infection—spleen frontal sinus, gall bladder of appendix, and transfusion repeated at intervals to permit rest to the bone marrow functions which become exhausted. A favorable prognosis may never be made unless the case be seen before spinal cord changes occur.

J. M. BELL.



Dr. Owen Krueger, of Kansas City, is now head of the Red Cross surgical service at Riga.

Dr. Hanau W. Loeb has been appointed chief of staff of the Jewish Hospital, St. Louis, succeeding Dr. Herman Tuholske, resigned.

Tropical Medicine Floating School—The proposal of Dr. Louis Sambon, at the Royal Society of Medicine, for the establishment of an interallied floating school of tropical medicine for investigation, scholastic and hygienic purposes, has met with a cordial reception among British medical men. His idea is to equip a floating laboratory with a staff of experts from the various nations and complete laboratories for the study of the cause and prevention of tropical diseases wherever they exist.

A World Wide Circulation—The circulation of the Medical Herald is no longer confined to the Missouri Valley and Southwest, as evidenced by the daily subscriptions coming in from all parts of the United States and foreign countries as well. Recent additions to our foreign list include: Dr. G. W. Bertram, Paris, France; Wm. Bowen, British Africa; Dr. Vernon B. Ditchman, Tembane, London, Eng.; Dr. Zosimo Fernandez, Pagasanjan, Laguna, P. I.; Dr. Roman Sabas Flores, Merida, Yucatan, Mexico; Dr. W. H. Newhook, Pushthrough, Newfoundland; Dr. Nicholas Russell, Nagasaki, Japan.

Arsenic in Coal—In a paper recently presented to the French Academmy of Science M. Charles Richet discussed the subject of arsenical poisoning by coal and coal products. There had been an outbreak of serious symptoms at a briquette works. The name given to the disorder was the pitch disease. In many cases there was cutaneous cancer of a grave form, which even proved fatal; about 30 per cent of all the employes were affected in this way. The symptoms were varied, but taking them all together they presented distinct analogies to chronic arsenical poisoning. A chemical analysis was made of the pitch and arsenic was clearly found in it and traces of it were also discovered in the dust at the works, in the hair of all the workmen (and that in considerable quantities) and in the blood of most of them. It has been long known that certain varieties of coal contain notable quantities of arsenical pyrites, but it is a new thing to find that arsenic is so widely to be found in coal or that it could produce such pathological results.

Medicine, like art, is a jealous god, it requires the whole and entire man.

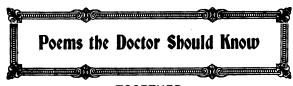
Pneumonia may occur in infants without any cough. The rapid breathing, and a slight catch in the inspiration, are diagnostic symptoms that should be carefully looked for.

The Vaccine Treatment of Coryza—Attention is directed to the end-results of ordinary catarrhal inflammations of the nasal mucous membrane, especially when the attack is prolonged, and frequently repeated. In these cases the sinuses become involved and infection persists. Fifield (Med. Record, March 10, 1917) has found autogenous vaccines to be very beneficial under such conditions, and better than stock vaccines. Patients who suffer from obstruction of the nasal cavities must first have these lesions relieved, before the vaccine treatment is applied.

Diphtheria—The importance of swabbing the throats of school children at the first appearance of diphtheria among them is emphasized by Dr. L. B. Gloyne, Kansas City, Kan. (Journal A. M. A.). They may become carriers whose quarantine is as essential as that of the diphtheria patients themselves. Two negative cultures should be required as a minimum in every case in which a positive culture was obtained. Antitoxin has a definite place in immunizing against diphtheria, but it does not kill the bacillus. Carriers usually clear up entirely without the aid of antitoxin. Glyone gives his experience with a school in a limited section isolated by natural boundaries in Kansas City, Kan., where fourteen cases occurred with the rest of the city free from the disease.

Botulism Study—A fund has been raised by the olive growers and the canning industry for an intensive study of botulism in California. The investigation will be conducted in the laboratories of the Stanford University Medical School and the George William Hooper Foundation for Medical Research of the University of California and has the cooperation of the U. S. Public Health Service and the California state board of health.

Air Service Medical Association—Medical officers formerly or at present connected with the air service of the army have organized the Air Service Medical Association of the United States and have elected the following officers: President, Dr. John A. McReynolds, Dallas, Texas; vice-presidents, Col. Theodore C. Lyster, New York City; Col. Eugene R. Lewis, Dubuque, Iowa; Col. Isaac H. Jones, Philadelphia; Col. William H. Wilmer, Washington, D. C., and Col. Albert E. Truby, Washington, D. C.; secretary, Major Vernon K. Earthman, Dallas, Texas, and treasurer, Major Robert S. McCombs, Philadelphia. The next meeting of the association will be held in the St. Charles Hotel, New Orleans, April 26.



TOGETHER

By Margaret Sangster

They lay together in the sun and waited for the end; Side by side, together, bearded foe and friend; Jean from the pleasant fields of singing, Southern France,

Jean from the poppy fields sighing with romance; Fritz from a Fatherland he blindly loved and served, Fritz whose soft-nosed bullets had never flinched nor swerved

And Peter whose tired eyes were wide and deep and brown.

Peter from Delancy Street, in New York town.

They didn't speak, these three,
They didn't know each other's tongue;
And then,
When men
Whose songs are nearly sung
Are lying side by side,
Their breathing not so free,
The gulf is rather wide.

In the sun they lay there; And Fritz's hair was very bright He was a foe To kill on sight— And yet the light upon his hair Was so, so very fair.

Jean found himself remembering her hair;
Of palest gold it was, a magic snare
To net men's souls in! She had bade him go,
Sobbing, "Je t'aime"—which means, "I love you so!"
Her hair—her hands—her lips,
Red as sunset cloud when daytime slips
Into the night. No, redder!

Like a flower That blooms upon the earth for just an hour; A poppy flower, fragile, soft—Her lips Red as the heart-blood of a man that drips Into eternity.

> Jean sighed, And died.

Perhaps her lips were very near—who knows? When eyes must close Against the sun, and life, who cares? One only dares To wonder!

Fritz lay still,
He felt the strength, the faith, the stubborn will,
Drop from him like worn garments, till he lay
Half-frightened in the burning light of day.
He had killed many, yes—
From his tunic, gropingly, he drew a cross;
He wondered would it make, for her, the loss
A little less?
Ah, to press
His bearded lips once more upon her cheek,
To hear her speak.

Yes, he had killed, and killed—And he had thrilled
To do it. . .
But just to sit

Beside her, in the shade, That had been paradise! Her soft arms laid About his throat. They strangled him His eyes grew dim. He choked—once—twice—

Peter from Delancy Street laughed with white-lipped pluck.
"Dyin' side o' him!" he coughed. "Aint it rotten luck!"
"Poor guy, they got him though—got him same as me."
Peter from Delancy Street, stopped talking suddenly.

He saw
A candy store,
On the busy, smelly corner of a crowded city slum;
He heard the hum
Of traffic in the street,
The sound of feet
Upon the pavement; and he saw
Behind the counter there
The Girl. She wore
Her hair
Plastered tight to her little shell-like ears.
He felt her tears
Upon her face
The night he told her that he'd left his place,
His steady paying job, to go and fight.

"Good night!"
He'd said to her.
"Somebody's gotta go!
Yerself, you know,
We gotta stir
T' lick them fellows Over There!"
Her slicked-back hair
Had roughened up against his khaki sleeve,
And she had cried:
"Dear, must you leave?"
And he had dried
Her eyes, and smudged the powder on her nose.

"Here goes!"
Said Peter of Delancy Street.
He saw a candy store—
A city slum, a girl with plastered hair,
Who waited there.

They lay together in the sun—bravely to the end, Side by side, together, bearded foe and friend. Jean from the poppy fields, sighing with romance, Jean from the laughter-lilting fields of Southern France;

Fritz from a Fatherland he blindly loved and served. Fritz whose faith, although betrayed, had never flinched or swerved;

And Peter, whose tired eyes were questioning and brown,

Peter from Delancy Street, in New York town!

WANTED

God gives us men. The time demands
Strong minds, great hearts, true faith and willing
hands;

Men whom the lust of office does not kill; Men whom the spoils of office cannot buy; Men who possess opinions and a will;

Men who have honor; men who will not lie; Men who can stand before a demagogue

And damn his treacherous flatteries without winking;

Tall men suncrowned, who live above the fog
In public duty and in private thinking.

—J. G. Holland.

ELECTRO-THERAPEUTIC WEEK IN KANSAS CITY

At the Little Theatre, May 24, 25, 26, 27 and 28, 1920.

SECOND LECTURE COURSE IN ELECTRO-THERAPY

by Dr. B. B. GROVER, May 24 to 26.

Dr. Jefferson D. Gibson, of Denver, will give a special demonstration of his technic in the treatment of pulmonary tuberculosis.

Classes are now being formed. Number limited.

Western Electro-Therapeutic Association, Annual Meeting, May 27-28. Send for program and registration blank. Chas. Wood Fassett, M. D., Secretary, Kansas City, Mo.

PROGRAMME

LECTURE I.

Monday 10:30 a. m.

What is electricity? Progress of electricity; energy; classification of electricity; potential, voltage, amperage, ohms and watts.

LECTURE II.

Monday 2 p. m.

Electrons; types of primary cells; more about volts, amperes and ohms; electric meters; rheostats and resistance; conductivity; magnets and magnetism; electro-magnetic induction; self-induction; motor-dynamo; transformers; electrolysis; ionization.

All subjects illustrated by lantern slides. Demonstration of apparatus.

LECTURE III.

Monday 8 p. m.

Galvanism; physiology; electro-diagnosis; shotgun therapy; ionization in gonorrhea and gynecology; faradism; wall plate; static electricity; physiology; prostatic drainage and therapy; static technic; care of machine, etc.

Lantern slide illustrations.

LECTURE IV.

Tuesday 10:30 a. m.

High frequency currents; a true d'Arsonval apparatus illustrated; physiology; fulguration; desiccation; electro-coagulation; bladder tumors and technic of treatment; tennelling a prostate; electrodes; auto-condensation technic; sinusoidal currents; lateral curvature; intestinal stasis; indicanuria. Lantern slides.

LECTURE V.

Tuesday 2 p. m.

Blood pressure; physiology; effects of drugs; arterio-sclerosis; the sphygmomanometer; methods of taking blood pressure; phases; puise pressure; normal blood pressure; blood pressure in surgery, obstetrics and disease; lantern slides; demonstration of apparatus.

LECTURE VI.

Tuesday 4 p. m.

Dr. Jefferson D. Gibson will lecture on "How Tuberculosis May Be Cured," with details of technique.

(This lecture alone will be worth the fee charged for the entire course.)

LECTURE VII.

Wednesday 10:30 a.m.

Hyperpiesis, its essential features distinguished from hypertension of nephritis and arteriosclerosis; its early manifestations and treatment; lantern slides, illustrating different phases of hyperpiesis; genito-urinary diseases; electrotherapeutic methods of treating gonorrhea; skin diseases; ideal treatment of hemorrohoids.

LECTURE VIII.

Wednesday 2 p. m.

General diseases; goitre and its treatment; paralysis; rheumatism; urethral stricture technic; diseased tonsils, etc.; diathermy; physiology; how to secure hyperemia in any part of the body; pneumonia; inflammation and muscular spasm; cirrhosis of the liver; tuberculosis; vaso-motor disturbances; heart disease; bronchitis; demonstration of apparatus.

LECTURE IX.

Wednesday 8 p. m.

Pain; character of pain; bursitis; neuralgia and neuritis; differential diagnosis; headaches; backaches; examination of patient; roentgenology; roentgenologist and technician; x-ray machines; roentgenotherapy; x-ray dose; fractional, semi-intensive and intensive treatment; dermatitis; cancers, how treated; fibroids, how treated; skin diseases amenable to roentgenotherapy; tuberculosis.

Lantern slides.

Tickets: for entire course, \$25.00.

An exposition of electro-therapeutic equipment will be held in the Little Theatre during the Week.

The Western Electro-Therapeutic Association

Organized in Kansas City on May 8th, for the purpose of cultivating and promoting knowledge in whatever relates to the scientific application of electricity and other physical measures in medicine and surgery.

OFFICERS FOR 1919-1920

President..Dr. B. B. Grover, Colorado Springs, Colo. First Vice-Pres..Dr. W. P. Grimes, Kansas City, Mo. Second Vice-Pres.Dr. Theo. F. Clark, Eldorado, Kas.

Secretary . Dr. Chas. Wood Fassett, Kansas City, Mo. Treasurer.....Dr. Chas. Keown, Independence, Mo. Registrar......Dr. E. A. Nelson, Phillipsburg, Kas.

The next meeting will be held at Kansas City, Mo., May 27 and 28, 1920.



Some High Frequency Don'ts

Do not employ diathermy if there is a recent history of hemorrhage; no matter where the hemorrhage is from, that place must be avoided.

Do not employ high frequency currents to the prostate if there is a history of growths in the bladder.

Do not apply diathermy to the thyroid gland in cases of hyperthyroidism.

Never apply diathermia to an actually infected

Acute rheumatism is aggravated by diathermic currents.

Be cautious in the application of autocondensation in advanced arterio-sclerosis.

Do not apply diathermia to sinuses of the head unless there is free drainage.

Do not apply diathermia to an infected gall blad-

Do not administer autocondensation to a patient with a temperature of 100 or above

Don't touch a patient while under treatment by autocondensation.

Don't forget to prescribe a dose of castor oil to a patient taking treatment by autocondensation.

Do not use high frequency vacuum electrodes in the male urethra.

Do not expect any favorable result from a high frequency cataphoric electrode.

"Phantasy of Ionic Medication"

Major Walter J. Turrell, M. D., Oxford, in an address before the Royal Society of Medicine, took occasion to say "The great benefits which electrical treatment had conferred on the wounded had drawn the attention both of the public and the medical profession to its great value and its greater possibilities in the future.

He also said that he would attempt an exposure of what he termed the "Phantasy of Ionic Medication."

He held that this method of treatment, about which so much has been written and even more said, did not in reality exist. He most emphatically denied the possibility of the introduction of such drugs as iodine and salicylic acid into the body by an electrical current and there as such obtain their therapeutic action. He says "the idea of ionic medication was opposed by the teachings of Faraday, for he was lead.

to formulate his theory of ions to explain the fact that the products of electrolysis appeared only at the electrodes and not in the interior of the electrolyte." In the same address he, however, admits that poisoning of rabbits is possible and that iodine may be found in the urine after ionic medication, but that it in no way proved the deep penetration of their ions. but merely showed that they had been carried through the superficial layers of the skin, and then, having lost their electrical charge, had passed into the capillary circulation and then to the spinal centers in one case and the kidneys and the bladder in the other.

His admissions destroy his own argument in regard to ionic medication. There are few drugs outside of alkaloids that as such are supposed to enter the body through ionization. It has been proven over and over again that ionic medication in selected cases is by far the best method of securing results. Major admits the beneficial action but adds that it is entirely due to the current itself regardless of the kind of solution on the electrodes.

Electrotherapists make no claim that copper and zinc as such are driven into the body by the action of the continuous current. Copper and zinc are broken up and form new compounds by the electrolytic action of a continuous current. The chlorine ion of the sodium chloride existing in the tissues of the body unites with the metal forming an oxychloride and as such exerts its influence on the tissue in the immediate neighborhood of the application. No one claims that these metals pass from one electrode to the other. The ionization of chlorine has demonstrated in thousands of cases in the late war, to be an ideal method of cleaning up indolent ulcerations and the ionization of copper and zinc has proven their efficacy in stimulating the wounds to heal. iodide of potassium is taken into the stomach, it is broken up and the ultimate ion of iodine does the same work in the body as when it is driven into the tissues by ionic medication. The only difference being in a more concentrated action in the immediate neighborhood of the electrodes.

There is a preponderance of evidence to prove the beneficial effects of ionic medication and it will require something more than a bare statement to disprove its value. Ionic medication of course has its limitations, but within that limit it is a method not to be discarded. B. B. G.

ROOT OF ALL AILMENTS

Pve got a boil on the back of my neck. Think I'll consult a boil specialist."

The scientific way today, old chap, is to have a dentist look over your teeth."



The Laboratory News

AND CLINICAL REVIEW

(Consolidated with The Medical Fortnightly, October, 1914) (Merged with The Medical Herald January, 1920)

A Journal of Laboratory and Clinical Facts for the General Practitioner Edited by Thos. A. Hopkins, M. D., St. Louis, Mo.

ROENTGENOTHERAPY

Dr. Fred Wise, New York (Journal A. M. A., Nov. 15, 1919), notices the advances that have been made in roentgenotherapy in the last few years. Improvement in the manufacture of the various types of exciting apparatus, and devices for measuring the quality and quantity of the rays, have made the treatment more exact. The culmination has been the Coolidge tube. The author describes the technic he has employed since the advent of the Coolidge tube, which, with its stable and constant vacuum, permits one to determine the dosage by the length of the parallel spark gap, the distances between the anode of the tube and the skin, the amount of current in a given exposure and the length of time of the exposure. He used a 2 kilowatt 60-cycle transformer unit, with a rotary converter to convert the direct current of 220 volts to an alternating current, and with a so-called rectifying disk, mounted on the same shaft. Attached to the cabinet are an amperemeter, a rheostat, a milliameter for the exciting current, and a meter for the Coolidge tube filament. The filament is heated by a current from a small separate rotary converter, fed by a 110-volt main, the current from which is passed through a step-down transformer. An apparatus of this type seems sufficient for all purposes of the dermatologist in his daily practice. It is capable of backing up an 8-inch parallel spark gap, and may therefore be used for deep therapy, a filter of 3 mm. of aluminum being used. Wise finds a hard ray (No. 8 to 9 B ray) preferable in his practice to much softer or much harder ones. The accessories, table, tube stands, etc., are described. In a general way, the treatment of widespread and general skin diseases consists in the administration of repeated fractional doses to the whole affected surface. Considerable variation is allowable, of course, to meet the different cases. The rays are so administered as to permit of approximately equal distribution over flat and convex surfaces. unwise and may even be dangerous to expose more than one-third or even one-fourth of the body surface at the same sitting or on the same day. It is best to allow several days to intervene between the treatments, so that approximately two exposures a week are suitable. One must remember that intensity varies inversely as the square of the distance be-tween the anode and the skin. The extensive dermatoses that most favorably respond may be placed in two groups: the first, those in which a lasting betterment or permanent cure is to be expected; the second, those in which all we can hope for is temporary benefit. "The first group includes such diseases as lichen planus, seborrheic dermatitis, various forms of eczema, extensive eruptions of pityriasis rosea and of acne, generalized prurigo, and various forms of lichenification. The second group embraces psoriasis, dermatitis exfoliativa, pityriasis rubra, mycosis fungoides, leukemia cutis, the various forms of sarcomatosis and lymphogranulomatosis, Darier's disease, acanthosis nigricans, and other dermatoses having a tendency to implicate extensive surfaces of the body." While not going into details as to therapeutic results, Wise says that he has seen better response to the roentgen ray in a large proportion of the diseases mentioned than to any other treatment. The advantages need not be enumerated; it is practically the only remedy in the graver dermatoses. The most striking results are obtained in mycosis fungoides and Kaposi's sarcoma. While the rays do not cure the graver maladies, nothing will compare with them in relieving subjective symptoms, checking the progress and retarding the fatal outcome. The author has had too little personal experience in the treatment of pityriasis rubra pilaris, dermatitis herpetiformis and the various bullous and desquamative diseases grouped under the general head of pemphigus to venture an opinion as to its efficacy, but he believes they should be tried. His conclusion is: "The carefully computed fractional dose administration of roentgen rays may be used with impunity in the great majority of extensive dermatoses, which do not readily respond to the usual older remedies; and though it is true that certain maladies seem to be not susceptible to the healing properties of the rays, roentgenotherapy should nevertheless be given a chance to prove its worth, in the knowledge that no harm, and possibly a great deal of good, may result from its ju-dicious administration in many of the widespread dermatoses."

ARTERIOGRAMS

A. N. Donaldson, Loma Linda, Cal. (Journal A. M. A., Dec. 6, 1919), having obtained indifferent results from the use of the Erlanger capsule for obtaining a brachial arteriogram, suggests the following as a substitute method: "A graduate, about 5 cm. in diameter, may be used and cut so as to secure a cylinder, 9 cm. long. The two ends are plugged with rubber corks, each perforated by a single opening. Glued in the hole in one cork is the stem of an ordinary Marey tambour; in the other cork is a short glass tube to connect the capsule with the recording tambour of the polygraph. On Marey's tambour is used one thickness of ordinary dental dam. This holds the pressure in the cuff and responds readily to brachial pulse changes." He has found that this arrangement and a pressure equal to the diastolic pressure in the cuff, gives most gratifying results, especially with nervous patients difficult to keep quiet. The article is illustrated.

Saving the Doctor's Face—A Hopkins doctor is of the opinion that fully one-fourth of the women who come to him for medicine need only to work, but we are not going to say which one of our doctors it is.—Hopkins Journal.



REPAIR OF URETHRAL DEFECTS

Dr. F. Legneu (Journal of Iowa State Medical Society) describes a unique method of repairing defects in the urethra which cannot be repaired by simpler methods. The sclerotic urethra is excised from the fistula to the base of the glans penis through a longitudinal incision underneath the penis. glans is tunneled by a trochar, the incision being large enough to take a 26-F. sbund. The outer end of the urethra at the point of fistula is freed to about 1.5 cm. In the meantime another operator is doing a colpoparineorrhaphy, a rectangular segment of the vaginal mucosa is dropped for a few moments in a warm artificial serum, then rolled about a 26-F. bougie, its edges caught with fine catgut so as to form a tube about 8 or 9 cm. long. The bougie carrying the graft is then introduced into the tunnel in the glans penis and placed in the gutter left by the incision of the anterior urethra, care being taken to place the line of graft suture in the angle of the two corpora cavernosa. The end of the bougie is introduced into the urethra and sutured end to end to the graft by an interrupted catgut suture. The superficial tissues united in two layers over the graft and a small drain left in place, the outer extremity of the graft being sutured to the meatus. The bougie withdrawn on the third day.

Legneu has performed three operations by this method with two excellent and one good result. The technic is difficult and requires much time and skill.

The first step is to establish a temporary diversion of the urinary stream by a urethra tongue by suturing the skin to both ends of the wounded urethra. Several months must elapse before applying the graft in order to secure freedom of infection.

The second preliminary requirement is a suprapubic cystotomy, preferably, before the urethrastrong, to further protect against infection. Third step, tunneling: the application of the graft of vaginal mucosa obtained as above indicated. This is a delicate procedure and must be cut to fit accurately; the method is described in detail in the published paper.

The after treatment involves much care; the primary dressing if left in place for eight days. Eight days later a small bougle is very gently introduced and thereafter the caliber of the canal is maintained by bougle or sounds.

The fistulae are closed by dissecting up of the underlying tissue and suturing the skin over the urethra with silk worm gut. This is done after the graft has satisfactorily united.

PNEUMONIAS FOLLOWING INJECTIONS OF ARSENOBENZOL

Schwerdtfeger and Tinker (Am. Jour. Syphilis; Vol. 3, No. 2) state that nine syphilitic were injected intravenously with Arsenobenzol and immediately following the injection or within a few minutes developed symptoms of irritation to respiratory organs and within a few days bronchopneumonia. They were ail critically ill, but made complete recoveries.

The symptoms were pain in chest, cough, prostration and dyspnoea. The last symptom was extreme, the patients having to assume the sitting pos-

ture. Physical signs of brochopneumonia developed in from one to three days in 8 out of 9 cases. In one case no abnormal signs were found but the clinical course in this case was the same as the rest. Febrile reactions were mild. The cought was short and distressing. Expectoration was bloody in four cases. The pulse ranged from 88 to 116. The highest temperature was 103.4. Cyanosis was slight in 3 cases and absent in the others. None had haemoptysis.

The physical signs were the same as in bronchopueumonia from other causes. One case showed a mild optic neuritis. The general course of the pneumonias was that of a moderately severe type. Albumin was present in 7 cases, granular casts in 2 cases, but these findings all cleared up. No haematuria or uremic symptoms were present.

The highest leucocyte count was 30,800; the lowest 8,400.

Blood cultures showed streptococcus hemolyticus in 3 cases; an unidentified diplococcus in 2 cases and were sterile in 4 cases.

The sputum contained staphylococcus in 6 cases; streptococcus hemolyticus in 2 cases, and an unidentified diplococcus in 1 case.

The water used for injection was 5 to 7 days old and contained a few Gram positive diplococci. Each patient received 0.467 Gm. on the average of the drug, dissolved in about 20 c. c. of water. All technic regular except the amount of solution given at each injection.

In conclusion the authors state the following:

- 1. The reactions could not have been caused by undissolved particles, as this would not have happened in all cases.
- 2. They could not have been caused by bacteria, as the reactions were immediate.
- 3. Water was not responsible as the same water had been used before.
 - 4. The alkali was sterile.
- 5. All the patients had been previously treated with some preparation of Arsphenamine.
- 6. The technic was not at fault as the same methods had been used in 200 other cases with no ill effects.
- 7. The reactions were immediate and were caused by chemical irritation. The authors thought the drug was responsible.

The Surgeon-General's Office commented as follows: "The only explanation other than the one given which occurs to me, is that the method of giving a concentrated solution may have something to do with results. The fact that the same technic was used in 200 other cases must be considered.

From our experience it is very possible that Salvarsan will pass all required tests and still be able to produce toxic effects especially in concentrated solutions."

This arsenobenzol lot No. 907 was tested one year ago and passed a 90 mg. per kilo test. This week (Jan. 25, 1919) it was tested again and passed at 100 mg. per kilo. Apparently some other factor than the essential toxicity of the preparation must have caused these bad results, according to the Director of the Public Health Service.

Col. F. F. Russell calls attention to page 30 Man. of Treat. of the Venereal Diseases, 2nd edition, in which directions are given about the water to be used and also in regard to dilution. It reads as follows: "It is important that freshly distilled water be used for Arsphenamine solution. 30 c. c. of water per decigram of Arsphenamine is a safe dilution.

DROPSY

Indications:
Dropsy of any origin,
Bright's Disease,
Valvular
Diseases,
Heart Trouble
following Influenza, Cirrhosis,
Anasarca.

This is an advertisement of our sole product, into which we put all our efforts to produce as nearly a perfect remedy as possible, for just two of the many ailments of humanity which you are called upon to treat.

DROPSY AND HEART DISEASE

ANEDEMIN doesn't always relieve even these, but it will give you a better result in a greater number of cases than any other remedy, and do it without danger to your patient and with no bad after-effects. It has no cumulative action and produces no stomach disturbance; is a powerful diuretic without irritating.

Sample, literature with formula to physicians.

ANEDEMIN CHEMICAL COMPANY, Chattanooga, Tenn., U. S. A.

Anedemin Chemical
Company, Inc.
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Send sample and booklet

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Notes on Reliable Remedies

Oral Disinfection-The prevalence of infections of the oral and pharyngeal cavities leads to an inquiry into the most reliable methods of prophylaxis. Under normal conditions numerous micro-organisms have their habitat in these cavities or decreased resistance, possibly, is responsible for a relative increase of virulence of some of the bacteria, and an infection results. Acute follicular tonsilitis, streptococcal infection, diphtheria, Vincent's angina or other pathological states follow and may lead to serious illness, with the possibility of a large variety of complications or sequelae. While all infections are not preventable, the ratio of incidence of bacterial invasion of the mouth and throat may be greatly reduced through attention to oral hygiene. The essence of prevention is cleanliness. Beginning with a more or less unsterile area of mucous membrane, measures of a bactericidal nature are indicated. The agency employed must be germicidal but free from danger to normal mucous membranes. The disinfectant action of Dioxogen, combined with its other properties recommend it as a practical hygienic medicament for use in the oral and pharyngeal cavities, though it is equally serviceable for intranasal application. Its freedom from poisonous qualities or deleterious effects has established it in the forefront of preventive disinfecting agencies. Its more extensive use as a gargle, spray, or local application would result in a higher degree of protection against many of the disease states whose source of infection is regarded as

oral or nasal. As an ideal antiseptic and germicide for the nose, mouth, and throat it affords a simple, convenient, effective and absolutely safe means of prophylaxis against the pathogenic organisms prone to attack through the nose, mouth or throat.

In the spring the eliminative functions do not present their usual activity owing to the torpor and locked-up secretions which have existed during the winter months and if this condition remains neglected, the probable result will be a pronounced attack of rheumatism, neuralgia or grippe in one or another of its forms. The necessity of a powerful eliminant is self-evident and a complete cure cannot be expected until the poisons are thoroughly expelled from the system and the diseased organs enabled to resume normal functions. Tongaline by promoting the absorptive powers of the various glands which have been clogged and by its stimulating action on the liver, the bowels, the kidneys and the skin, will relieve the pain, allay the fever, eliminate the poisons, stimulate recuperation and prevent sequelae.

Nose and throat specialists who are using Hemagulen, a product of the Lilly laboratories, are reporting that in using this as a local hemostatic following the removal of tonsils of children, less soreness seems to follow and healing is unusually rapid. This is accounted for by some who say that the active thromboplastic substance of Homagulen is not astringent to the tissues, aiding merely in producing and accelerating a normal clot by its local application. Hemagulen is prepared from fresh brain substance, is sterile and is a dated product—therefore should be kept in the ice box. Literature will be supplied on Hemagluen upon request made to Eli Lilly & Company, Indianapolis.

THE TEST OF THE TAMPON

The test of the tampon lies in the action and effect of the medicament it carries upon existing local inflammatory processes. Commonly used agents of this sort act only indirectly as a rule. DIONOL is something decidedly different. It acts efficiently because DIONOL reaches and affects local inflammation, acting in accord with the electro-pathology of this morbid process.

USE DIONOL ON TAMPONS

in the treatment of

Endometritis Ovaritis Salpingitis Cervical Ulceration Pelvic Cellulitis Cystitis Metritis Leucorrhoea Vaginitis

JUDGE DIONOL BY PERFORMANCE

The Dionol Co., Detroit, Mich. Dept. 27.
Please send literature, Case Reports, etc.

The Dionol Co.

864 Woodward Ave.,

Detroit, Michigan.

Respiratory Infections and Disinfections Many scientific investigators have emphasized the fact that the only possible way of local medication of the respiratory organs is by local inhalation. Infections are conveyed to these organs by inspiration, likewise the germicide must meet on the same method. This means a suitable instrument must be provided to accomplish the result. We believe that after careful consideration of the inhalation device you will agree it is the only way yet produced to successfully combat these infections. It is only necessary to suggest that in rhinitis, paryngitis, tracheitis, laryngitis, bron-chitis, pulmonary catarrh, and in some cases of pulmonary tuberculosis, the inhalation of this combination Creosote Formalin Iodin Compound has had marked beneficial effect in diminution of discharges and in alleviating the troublesome coughs without disturbing the digestive functions, thus conserving the nutrition which is necessary to restore lost energies and waste tissues. We, in this connection, call your attention to the successful use of this method in whooping cough, in cases old enough to use the inhalation method. Also, a number who suffer annually with the troublesome, and so far incurable malady, hay fever, are enabled to get relief by short-ening the period of complete cure. These well established effects of the inhalation method are entitled to preference as a perfected local medication of the respiratory tract. A trial will convince the most skeptical.

Hemorrhoids—It is very probable that it would be difficult to find any physician who does not at some time or other have occasion to prescribe a rectal suppository. Bearing in mind the fact that suppository treatment is largely palliative, it must be confessed that in a considerable number of cases, palliative treatment is absolutely necessary. This justifies the use of suppositories provided they are not depended upon to secure results only obtainable by operative means. There are many different formulae recommended for use by this method, but the combination supplied in Micajah's Suppositories has been found, after many years' increasing use, to be well suited to the purpose. Micajah's Suppositories contain no narcotic and their action is astringent, antiseptic, styptic and antiphlogistic. In many cases they relieve pruritus. They are soothing and healing. Being designed only for physicians' use, they are ethically advertised only and to any physician who is not acquainted with their nature and action, samples and literature will be promptly sent on request to Micajah & Co., Warren, Pa.

Armour and Company have added 5 grain tablets of corpus luteum, ovarian substance, anterior pituitary substance, to their list. These tablets are packed in bottles of 50 and are labeled "5 grain." Each tablet contains 5 grains of the desiccated glandular substance, each grain of which represents a quantity of fresh tissue. Physcilans desiring to use the granular substances in tablet form may now obtain the Armour products in 5 grain tablets, as well as the 2 grain.

A Mild Heart Stimulant—Cactina Pillets are a mild. non-cumulative stimulant and tonic to the heart and may be used in all cases of weakness, including the so-called tobacco heart, arrhythmia, tachycardia, etc., with results of gratifying character. It rests the heart by allaying irritability, and promotes cardiac nutrition, thus imparting strength and tone to the heart muscle.

We can learn much from the dead, but not by calling them back to deliver their message through parties of the third part.

The Management of an Infant's Diet

Constipation

In a very large percentage of cases of constipation in early life, this annoying condition is due largely to some fault in the diet, and usually the difficulty can be easily traced to an incomplete digestion of protein or of fat. By changing the food and advising a daily diet prepared according to

The Mellin's Food Method of Milk Modification

the condition is very often corrected immediately, for the reason that Mellin's Food helps materially in the digestion of cow's milk. In cases where the condition has persisted for some time, simple changes in the proportion of Mellin's Food, milk and water will soon bring about normal stools.

Practical suggestions relative to the readjustment of the diet are set forth clearly in the chapter on "Stools" in our book, "Formulas for Infant Feeding." We also have a pamphlet devoted particularly to the subject, and all of this literature will be sent to any physician upon request.

Mellin's Food Company,

Boston, Mass.

New Products—In view of the growing interest on the part of the medical profession in Benzyl Benzoate as an effective remedy for dysmenorrhea, biliary colic and other painful conditions originating in or attending spasm and contractions of the smooth muscle organs, it is of interest to receive from The Abbott Laboratories, of Chicago, an announcement that they now supply this popular product, both in tablet and liquid form. Further information may be obtained by writing to this firm. Among the other newer products, now being supplied by The Abbott Laboratories are Anesthesin-Calcidin Troches, for the relief of tickling coughs; Dichloramine-T (Dakin's popular antiseptic) in convenient tablet form; Procaine with Adrenalin; Cinchophen, Barbital and Barbital-Sodium. A newer form of Barbital-Sodium is the elixir, which is proving popular. .

An Effective Intravenous Solution—Guaisodide is a solution of guaicol and sodium iodide for intravenous use. It is ready for instant use and does not require any mixing or preparation of any kind; indicated in pneumonia, influenza, la grippe, tuberculosis and bronchial infections. Price, \$6.00 per box of six 20-mil, ampoules. Write for latest price lists of intravenous products to George A. Breon & Co., Kansas City. Mo.

"Moore" Power for Your Car—The Moore Auxiliary Transmission for the Ford car is the last word in efficiency. It makes your car the equal of any high-priced car on the road. Send for booklet and price. Address The Tractor-Train Co., 1439 Myrtle St., Los Angeles, Calif. Do it today. (See adv. in this issue.)

The public buys its opinions as it buys its meat, or takes in its milk, on the principle that it is cheaper to do this than to keep a cow. So it is, but the milk is more likely to be watered.—Samuel Butler.

PROSTATE SAVED

No Operation and Prostate Saved—Mr. E. S., aged 49. Case diagnosed by three physicians and surgeons as chronic enlarged prostate, with acute inflammation and ulceration. The acute condition had been maintained for ten days. Frequent micturations were accompanied by severe pain and the passing of blood and pus through the urethra. There was a constant ache in the prostate which often amounted to heavy pain. Operation had been advised. I fully agree with the diagnoses of the three other physicians, but from previous experience and careful observation of results to patients who had submitted to operation on the prostate, I did not advise operating. I prescribed:

Rx. Anchor rectal suppository No. 11 special (prostatic)

Sig. 1 suppos. each night at retiring

Rx. Soluble iodine (Miller's), 1 oz.

Sig. 5 drops in ½ glass warm water three times a day, ½ hour before meals.

In 48 hours there was no discharge of blood and pus; there was no ache nor pain in the prostate and the desire for frequent micturation had ceased.

The third day, patient felt able to resume his work which necessitates constant walking and carrying a heavy sample case.

Full treatment consisted of 1 Anchor rectal suppository each night for a week, then one every second night for two weeks followed by two suppositories a week for four weeks, with the daily use of soluble iodine (Miller's) internally, as prescribed.

Attention was given to proper diet and an occasional saline laxative, as necessary. Report six months after treatment gave no recurrance of trouble.

(See adv. page 59.)

M. D.

Do you know

Mental Deficiency and Delinquency!

Do You Know—That defectives are breeders and that their multiplication produces a progeny to tax the resources of municipal and national organizations?

Do You Know—That the mentally deficient in our public schools, in our juvenile and criminal courts, and places of legal detention, in the realms of venereal lothsomeness, invoices an expensive and humiliating holding and inoculates against every joy in life?

Do You Know—That one to two per cent of public school children are mental defectives, social unadjustables, and candidates for criminal corrections and the organized charity for indigents?

Do You Know—That the prophylaxis of the criminal tendency of the mentally defective is that which trains the individual away from crime?

Do You Know—That the correctional, reformatory and penal institutions of the United States of America are custodians of one half million men, women and children, yearly?

Do You Know—That the criminal himself, "the man above the eyebrows" (Hugh T. Patrick) is constantly being lost sight of in our etiological studies of crime and its therapy?

Do You Know—That psychiatric clinics should be so organized in penal institutions as to be able to exercise the scientific conclusions of the clinic in lieu of the forever political tinkering with the psychological abnormality that made the inmate a legal criminal?

Do You Know—That more than 60 per cent of correctional and penal institution inmates are "bad pennies" returned for a recommission of the act that first committed them?

Do You Know—That something in the reflected personality, that daguerreotyped expression of the inner man "behind the eyebrows," externalized as "chronic criminality," is but the exhibit of a primitive neurologic or psychic abnormality to be seen in more than one-half of the inmates of correctional, reformatory and penal institutions?

Do You Know—That the administration of criminal law, man made law, to avenge an overt act going to a conclusion blindly, without understanding, is made clear by the fact that near 60 per cent of the population of penal and corrective institutions are psychologically personality mislinks and misfits, victims of the various types of psychic, subconscious and unconscious epilepsies, mental defects, mental deteriorations and true mental disease?

Do You Know—That the prophylaxis and therapy of the disorded acts of a mind untuned to legal harmony "lies in the judgment field of the learned psythiatrist" rather than that of the jurist whose acquired differential ability lies in the steadfastness of his voting organization?

Do You Know—That mental defectives do further retrograde into fixed criminals in time; that a sick brain, neglected, tends to undergo irreparable disease change in time; that neglect is cruelty to the unfortunate and multiplies crime uselessly?

Do You Know—That a definitely organized psychiatric court clinic could often determine future

criminals and often evade the final irremedial day in court that starts the victim traveling in a circle of crime to prison, prison to crime, "nolens volens"?

S. GROVER BURNETT.

(Apologies to the Kansas City Star and Mental Hygiene.)

How to Get the Maximum Effect From Cascara-Success in the treatment of chronic constipation with cascara sagrada depends upon two things: the choice of a reliable preparation of the drug; second, its administration by a method that engages the patient's interest and co-operation. The bitter fluid extract is frequently selected for its peculiar tonic effect upon the masculature of the colon. In that event the patient is instructed to drop the prescribed dose into an empty gelatin capsule, which is then closed and taken like a tablet or pill. The initial dose may be ten drops at bedtime, or, in more intractible cases, three times daily. The idea to be kept in mind is to push the dose until a natural daily evacuation is established, then to maintain it for a time until the tonic effect of the drug is manifest. At this point, and not until then, the dose may be decreased gradually to the vanishing point. Parke, Davis & Co.'s bitter fluid extract of cascara sagrada is recognized as standard everywhere. It was the original preparation, first offered to the medical professtion nearly half a century ago.

He has More Legs—According to Dr. Edward Mallenby of London, a dog can drink twice as much whiskey as a man and stay on his legs. Of course he can; the dog has four legs, one on each corner.



A CLINICAL LABORATORY

THAT RENDERS A REAL SERVICE

The BEEBE LABORATORIES, Inc.,

have opened a well equipped Clinical Laboratory in the Argyle Bldg.,

KANSAS CITY, MO.

Your inquiries will receive prompt, personal attention.

Specimens reported the day received.

BEEBE LABORATORIES, Inc.

ARGYLE BLDG., KANSAS CITY, MO.



Infectious Meteorism-Max Einhorn reports several cases of what he terms an infectious meteorism. Two types of meteorism are recognized (1) the mild type due to overloading the digestive tract with indigestible foods; (2) the severe form caused by partial or complete obstruction of the bowel. In the infectious form there is no obstruction, but a general paralysis of the bowel is encountered. The latter type is probably due to an infection. It occurs idiopathically. While a secondary infectious meteorism may occur in infectious diseases as typhoid, pneumonia, cholecystitis. The general symptomatology is suggestive of peritonitis, autopsy has revealed in some cases localized areas of peritoneal infection, in others none. He suggests rest, irrigation, opium, large doses of atropin, rectal tube for gas, olive oil enema and if vomiting is persistent, laparotomy.

Gastric Ulcer has frequently followed the removal of the suprarenals, hence the growing practice of employing suprarenal therapy. Gastric ulcer is usually associated with a suprarenal insufficiency, while duodenal ulcer follows thyroid insufficiency. Good results are reported following the use of kidney cortex, better than with suprarenal substance.

Following diarrheas, specially in children, it is well to bear in mind the three occult conditions which may occasion death, viz., acidosis, demineralization and dehydration, with their associated loss of flesh,

air hunger, and weakness. They call for liberal use of water, alkalies and fruit.juices.

The antiscorbutic influence of fruit juices may be destroyed by heating, the metabolist reminds us. The ideal and most available agents are orange and lemon juice. Hess has introduced orange juice directly into the circulation of scorbutic infants.

J. M. BELL

I asked the wisest man: "What are the four most important things in the world?" He replied: "Character, friendship, marriage, parenthood." I went to the board of education and asked: "Where can I be educated in the arts of character, friendship, marriage and parenthood?" And the B. of E. gasped and giggled: "My word, what a silly question."—Herbelt N. Casson.

Not Customary—"It is said that there are four motor cars for every bathtub in Kansas," remarked Professor Pate. "How unfortunate," replied J. Fuller Gloom. "It is hardly feasible to jam six or eight persons, young and old, all at the same time, into one bathtub, as we see them in the average Ford."—K. C. Star.

Doctor, if your receive a copy of the Medical Herald and are not a subscriber, please take it as a cordial invitation to remit a dollar and receive our magazine for the year 1920. Turn to advertising page 68 and note the feast of "Good Things to Come" in the early issues of the Medical Herald.

Cutting Out the Superfluous—The flu is not without its compensations. One of our leading hospitals has announced that "during the epidemic, no unnecessary operations will be permitted."—Chicago Tribune.

↑ NNOUNCING:

The opening of a new branch at

718 FELIX ST. (Second Floor) ST. JOSEPH, MO.

Fully equipped to give individual attention to your prescriptions and surgical instrument orders.

MERRY OPTICAL COMPANY

KANSAS CITY, MO.

ANNOUNCEMENTS

Dr. Walter J. Hansen, of St. Joseph, has been appointed Deputy State Health Commissioner.

Hay Fever—Doctor, consult your own interests. Cure the hay fever. See adv. page 60, and send for a "Perfection."

Dr. Charles H. Mayo, of Rochester, has been elected an honorary fellow of the Royal College of Surgeons, England.

Dr. Richard L. Sutton. of Kansas City, delivered an illustrated address recently on cancer of the skin, before the Dade County Medical Society at Miami, Fla

For Goitre—Doctor, you should try the special goitre tablets put up by the Columbus Pharmacal Co., Columbus, O. One trial will convince you. See announcement in this issue.

The American Medical Editors' Association will be held at the Gruenewald Hotel, New Orleans, April 25 and 27, under the presidency of Dr. Seale Harris, editor of the Southern Medical Journal.

The American Medical Association meets in New Orleans April 26-30, under the presidency of Surgeon General Wm. C. Braisted, U. S. Navy. Winter tourist rates will be in effect on all railroads. Members should consult their local ticket agent early in regard to the fares.

Dr. R. B. H. Gradwohl, of the St. Louis Biological Laboratories, has opened a Chicago Laboratory in the Chicago Savings Bank Building, corner Madison and State Streets, Chicago, Illinois. This laboratory is supplied with the very latest and best equipment for rendering physicians efficient service.

Dr. L. A. Marty announces the removal of his X-Ray Laboratory from the Rialto Building to larger quarters, in his own building at 805 McGee Street, Kansas City, thus combining his diagnostic and treatment work. The entire building is given over to X-Ray and Radium work. This laboratory is completely equipped with modern apparatus.

Dr. Katherine L. Storm of Philadelphia, is announcing the removal of her offices from 1541 to 1701 Diamond Street, Philadelphia. The new building will treble the capacity of the present building, and is being equipped with every facility for quick and exact work. Dr. Storm is justly proud of the ever widening demand for the Storm Binder and Abdominal Supporter, and is planning to maintain her reputation for immediate response to each order.

Golden Opportunities BARGAINS FOR YOU

Listen, Doctor—If your car is giving you trouble during this changeable weather, it is your carburetor, no doubt. Why not end all your troubles by installing a "Zenith?" The doctors are all doing it.

New Sex Book—A practical, common sense, plainspoken little book on the sexual functions, by Mary Ware Dennett. Price, 25c, postpaid. Address Book Department, Medical Herald, Kansas City, Mo.

Bathing Girls—Just out. Pretty, modest and fascinating pictures for the doctor's sanctum. Fifty cents each; five pictures, all different poses, for \$2.00. Address Art Department The Medical Herald, Kansas City, Mo.

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Doctor, if you receive a copy of the Medical Herald and are not a subscriber, please take it as a cordial invitation to remit a dollar and receive our magazine for the year 1920. Turn to advertising page 68 and note the feast of "Good Things To Come" in the early issues of the Medical Herald.

"Poems the Doctor Should Know," 16 pages, 45 poems of war, love and patriotism, including the immortal poem, "In Flanders' Fields," by McCrae, and several answers to its challenge. Price, 10 cents a copy, three for 25 cents. The Medical Herald, Ridge Building, Kansas City, Mo.



Vol. XXXIX ·

MAY 15, 1920

No. 5



THE MENTAL MECHANISMS OF WAR NEUROSES*

FRANK PARSONS NORBURY, A.M., M.D., F.A.C.P.

Jacksonville, Illinois.

Medical Director of the Norbury Sanatorium, Jacksonville, Ill. Recently Acting Medical Director of The National Committee for Mental Hygiene, New York, during the war emergency.

Among the invaluable contributions to clinical medicine resulting from the late world's war, and destined to be of great practical value in civilian practice, is the more complete understanding of the neuroses and their evaluation as clinical entities. War neuroses do not differ materially in their symptom complex from those occurring in civil life, but by reason of their very formidable nature, they became a serious problem to all of the nations concerned in and during the combat period of the war.

While it is true that the intelligent handling of these cases in the American Expeditionary Forces reduced to the infitesimal, the numbers returned home as uncured, yet, the cases cured and returned to this country carry with them potentials for possible return of mental maladjustments should they be confronted with perplexing situations in their home environment. It is, therefore, necessary that the family physician be acquainted with the clinical pictures of the neuroses and have at least a general knowledge of their mental mechanisms, that he may recognize these cases, urge prompt contact with the Medical Director of the U. S. Public Health Service of his district, that aid to which the patient is entitled may be given, under the War Risk Insurance Act.

My mission here, today, is to urge careful consideration of these important cases, prompt first aid, and intelligent care, that conservation of the

*Read before The Medical Society of The Missouri Valley, at Des Moines, Iowa, Sept. 18, 1919. mental and nervous attributes of the patient may be our earnest endeavor.

You have all had access to the generous contributions to neuropsychiatry of the war, as found in current medical literature, and doubtless have constructive interest in the welfare of such patients. You should be aware of the fact that in the hurried discharge of great numbers of soldiers and sailors that many of these deserving fellows, in their great desire to get back home, have been able to conceal, by repression, enough of their nervous or mental perturbation to warrant their discharge. Then, when they reach home and are confronted with some form of a perplexity sufficient to create a dilemma, they are precipitated into a recurrence of their neurosis.

Here, we at once meet with a problem in clinical psychology, easily explained, when one bears in mind that the soldier or sailor in his great desire to get home or to be relieved of an intolerable situation, was able to repress symptoms—the wish for escape from military life or the wish for home—caused the symptoms to temporarily disappear, only to recur with more fixedness because of the neurotic foundation and past experience, and thus present to the home folks and the family physician a very formidable problem.

I am seeing such cases. We have a number of them under our care. So important are they, and so confusing and difficult to understand, on the part of those in contact with them in the home, that it is our duty as physicians to see that every means be created to get in touch with these cases, that they may have intelligent care and treatment.

Now, let us consider the biological factors concerned in, as well as the clinical pathology of the neuroses and the principles upon which treatment is founded. I am aware that I can only briefly hint at essentials in the time allowed for the presentation of this paper.

The clinical pathology of the neuroses is comparatively new. It is, however, clear cut and easily interpreted if we will forget the rather acrimonious debate through which it passed, before American psychiatry was able to firmly establish it in its new accepted place. It is to American psychiatry in the war that the educational value of the importance of the neuroses can be attributed, and especially is it due to the excellence of the work in the A. E. F. that the clear cut clinical pathology has been defined.

The biological facts to be considered are briefly these: Man is a living machine, complicated in structure and so integrated as to generate, absorb, convert and expend energy. The conservation of energy is conducted through specialized mechanisms designed to be purposive in action and following behavior patterns developed through countless ages of man's evolution, all having to do with adaptations to meet the needs of the organism. These adaptations are the end results of experiences which have preserved the individual life of man and his species while at the same time contributing to his social achievements.

These mechanisms, in other words, are for the purpose of enabling man to meet the situations in life as he finds them, in order that he may live and have his being. Many of his endeavors to meet these varied situations may be misdirected, ineffectual, and as a result, maladjustments to circumstance and environment result. To understand all of the mechanitic trends, the behavior patterns, and the source of their origin, one must consider first, man's make-up, his skeleton frame, musculature, and their adaptations to do the maximum amount of work with the minimum expenditure of energy. Next, his physico-chemical mechanisms through which life is maintained, especially to understand the association existing between the vegetative nervous system (the autonomic system) and the internal secretions with their correlations with the primary emotions. This lays the foundation for a study of the personality of the individual with whom we have to deal.

Parker says (The Elementary Nervous System, p 16, Lippincott, 1919) "The modern view of personality is, strictly speaking, a property of the nervous system and is in no true sense the direct result of any other system of organs." "The nervous system, to be sure, is embedded among other organs of the body, and the environment thus provided influences profoundly its condition and action; but what is meant by individual personality, acuteness, or dullness of sense, quickness or slowness of action, temperamental traits, such as gloomy or bright disposition, incapacity, shiftlessness, honesty, thriftiness or sweetness, are all, in the strictest sense, functions of the nervous system."

In man, education has had much to do in the development of behavior reactions, and while the nervous system does not create specialized function, it does bring it to a higher degree of

precision and of efficiency by education. Personality, therefore, is closely dependent upon the functioning, the integrative action of the nervous system and of education which includes social environment. Kempf has elaborated these facts into a theory of personality depending upon the functioning of the autonomic apparatus. This dynamic theory of personality is based on the three integrative levels, viz: structural, physiological, and psychological.

"This mechanistic conception considers the fact that all organisms are immersed in a continuous bath of environmental stimuli. This bath, is, so far as the organism is concerned, composed of two general types of stimuli: the harmful and beneficial, for which all organisms have some avertive and acquisitive capacities. Because the living organism itself is a continuous complicated stream of metabolism, literally flowing through the stages of infancy, adolescence, maturity and senility, its avertive and acquisitive needs are constantly changing and this fluctuates the value of a relatively small proportion of the environmental back and forth, as harmful or beneficial. The avertive or acquisitive needs and motor tendencies depend upon the disposition of the autonomic apparatus" (Kempf, The Autonomic Functions and the Personality, p. IX, Introduction, p. 3 Part I. Nervous and Mental Disease, Pub. Co., 1918).

The autonomic apparatus here spoken of is practically the same as designated by Crile as Kinetic system (Crile, Man an Adaptive Mechanism, p. 9, MacMillan, 1916), viz: the brain, the adrenals, the liver, the thyroid, and the muscles. "These organs bear the brunt of the transformation of potential into kinetic or work energy and the neutralization of the consequent acid by-products in the body." It is not necessary to spend the time to elaborate either Kempf's theory of personality or Crile's Kinetic theory; both are contributions emphasizing Bergson's statement that "the history of the evolution of life, incomplete as it yet is, already reveals to us how intellect has been formed, by an uninterrupted progress, along a line which ascends through the vertebrate series up to man. It shows us in the faculty of understanding, an appendage of the faculty of acting, a more precise, more and more complex and subtle adaptation of the consciousness of living beings to the conditions of existence that are made for them." (Bergson, Creative Evolution, p. 9, Holt, 1911).

It is important that we be familiar with all of these biological factors which enter into our clinical problems because they are dynamic potentials which have to do with behavior patterns and mental adjustments, which, with their "elastic, though limited quotient of energy" are influenced by circumstance and environment in accordance with the great law of the conservation

of energy. This law seeks to achieve the maximum results with the minimum expenditure of one's resources.

Now, true to this law of conservation of energy, the maladjustments of mental mechanisms may become purely defensive mechanisms: man's behavior at any moment being the resultant of his cravings, desires, wishes, as they control the final neural paths of adaptation. This principle of defense reaction is found not only in the psychological level wherein the conscious and the unconscious mental mechanisms reign supreme, but likewise in "the level of the central nervous system in which the reflex is type of the instrument used." Here, we find the varied types of reflex activities: viz: simple, compound, and unconditional, either or all of which bring the individual into quick and accurate response to his environment.

Sherrington (The Integrative Action of the Nervous System, Yale University Press, 1911), has elaborated by physiological studies of the reflexes their value in interpretation of the integrative action of the nervous sysytem; while Mackenzie has given us their interesting and practical values in interpretative of clinical problems in internal medicine. We must understand all of these factors in dealing with the neuroses because the very definition of a neurosis, viz: a reaction out of proportion to the value of the stimulus applied, means that we must intensely study all functional reactions in order to estimate their value. But it is within the realms of the next level, viz: psychological, (the intellectual), that we are to find complexity in interpretation of the mental mechanisms of defense. In this realm "the idea" is the potential factor in adinstment.

As White says (The Principles of Mental Hygiene, MacMillan, 1917), "The idea is under all conditions the stimulus which sets in motion the mental reflex mechanisms and thus determines conduct, leading to adjustment with environ-This level in its full fruition includes not only adjustment to ordinary conditions of environment but extends to higher and idealistic realms of conduct, where social sanction, family and community ideals, love of country, etc., bind individuals into social units and collectively, bespeak for these units the social values which the civilization of the community of the Nation proclaim in their ideals. Thus is evolved the social value of an individual, by the constant interplay between his environment and himself, progressing successively from the primitive to cultural "Behavior is the criterion of an social levels. individual's social value to a community" and as it is the end result of all mechanisms, culminating with the mental, it is important for us to understand these essential mental processes upon which behavior is founded, if we are to be of

help in the interpretation and treatment of the problems encountered in the neuroses of the returned soldiers.

As behavior is the criterion of social value, so it is likewise the clinical index of mal-adjustment of mental mechanisms. Genetic psychology figures conspicuously in the understanding of behavioristic problems, especially delineated by MacDougal (Social Psychology—John W. Luce & Co., 1918).

The primary instincts with their primary emotions serve the utilitarian needs of the individual by their specific and peculiar reactions in behavior. As an example, the instinct of self-preservation with its emotional excitement, the emotion of fear, has a specific or peculiar reaction in flight or fight according as the utilitarian need may indicate. This principle holds good throughout the psychological interpretation of conduct or behavior. This is the guiding principle for unravelling the most concrete emotional experience, especially those classed under anxiety neuroses.

We will find in each clinical picture mingled with the impulses as display in instructive activities, their morbidly exaggerated intensity, a disposition for the emotion to be relatively independent; a functional unit or mental mechanism, capable, however, of becoming markedly disordered, hyper-excitable, independent of the other mental dispositions or mechanisms.

Individuals who have this tendency toward independent instinctive emotional reactions in an exaggerated manner, we term psycho-neurotic, and the disorder of these essential mental mechanisms, a neurosis. The neurotic constitution as such simply means a tendency toward lowered threshold values, thus opening more readily the way for stimuli to produce reactions in conduct out of proportion to the value of the stimuli. "The instinctive reactions always remain the same in essentials; they are permanent endowments and their nucleus is the central part of the innate disposition of the individual. The stimulation of this nucleus therefore determines an affective state—an emotional response—of specific quality, with a trend towards a specific end in conduct.

Emotions are independent of intellect; they are inborn endowments and precede intellectual development in determining conduct. Instinctive emotional reactions are destined primarily to make the individual adaptable to environment. circumstance and experience. They have characteristic and unquestionably bodily expressions, capable of being excited and too, for the purpose of adaptation to a situation needing immediate response.

The bodily defense reactions are familiar to us all. We are all susceptible to these reactions, which, while being essentially primitive and

given us that we may avoid distressful experiences, are nevertheless through education, capable of adjustments having high social values. Fear is the basis in reaction to all experiences which tend to endanger life or put in jeopardy the regard or esteem which we value as a social unit in the community, or our economic status, or, in fact, any experience which directly or indirectly appeals to the demands of self-preservation

As Morton Prince (The Unconscious, Mac-Millan, 1914) says: "Fear plays a large part in the psychogenesis and symptomatology of the neuroses and the psychoses that it is desirable to have a clear realization of its physiological and psychological manifestations and of the disturbance of the organism which it induces." The physiological reactions are precipitated for the most part through the visceral organs, the kinetic chain of Crile.

Cannon, (Bodily Changes in Pain, Hunger, Fear and Rage, Appleton, 1915) has delineated these bodily changes and energizing influence of emotional excitement. He has shown that every one of the visceral changes has utilitarian value. 1. The cessation of the processes in the alimentary canal (thus freeing the energy supply for other parts). 2. The shifting of the blood supply from the abdominal organs whose activities are deferable to the organs immediately essential to muscular exertion (the lungs, the heart, the central nervous system). 3. The increased vigor of contraction of the heart. 4. The quick abolition of the effects of muscular fatigue (through action of the adrenals). 5. The mobilization of energy giving sugar in the circulation (the glycogenic function of the liver).

Each and every one of these visceral changes is directly serviceable in making the organism more effective in the violent display of energy which fear, rage, or pain may involve.

Now, in the light of all these now well known effects of emotion, Prince says "It is apparent that when an idea possessing a strong emotional tone such as fear or its variants (anxieties) enters consciousness, it is accompanied by a complex of physiological reactions." Fear, anxiety in its reactions, therefore includes not only the idea, but a large syndrome of physiological pro-The scheme of Prince briefly presents cesses these reactions. 1. Fear, or one of its variants or radiations, namely, anxiety, apprehension. 2. Inhibition of thought blocking, confusion. Pallor of skin. 4. Increased perspiration. 5. Cardiac palpitation. 6. Respiratory distur-7. Tremor. 8. Muscular weakness. 9. Gastric and intestinal disturbances. Sensory disorders: 1. Paresthesia. 2. Feeling of oppression in the chest. 3. Headache. 4. Nauseau. 5. Pains. 6. Fatigue. 7. Exhaustion. 8. Fainting. 9. Collapse. Mental perturbations: 1. Confusion. 2. Dissociation. 3. Fuge. 4. Delirum.

The complex created is always welded to the primary emotions. The association reaction in consequence recurs as a syndrome every time the emotional complex is re-excited. The same physiological reactions, a part of the original stimulation, are repeated. It is important that each case be judged on its individual merits as the history of the case and of the special reactions are highly important in unravelling the clinical syndrome, its mode of onset, sequence, and associative relations which collectively make up the chaotic picture presented in the patient.

The experienced physician can often, from his knowledge of the phenomena of the emotions, analyze the dilemma at one sitting, providing the patient is accessible. But the treatment must insure a complete sounding of the full depth of the complex and bring into the field of consciousness all of the tangled threads of the complex, that the patient may see for himself, and understand, the reactions which have constituted his individual problem. We must penetrate the conflict, find out what the instinctive reactions through the conative force of the emotions, are doing, in driving the patient to give forth these individual conduct reactions. Here we find, in the soldier, the conflict is between self-preservation and duty, the sentiment of loyalty, patriotism, etc., against individual life. The outcome of the conflict depends upon which is the stronger, the instinct or the sentiment; the stronger dominating, and conduct corresponds to the dominating influence. We see that instincts and emotions are the prime movers of human conduct as the last analysis of the problems of the neuroses well shows.

The physical symptoms are always obtrusive while psychical elements, including the emotions which are of course primary factors and retain their potentials in the background of personality. Personality, as before stated, is strictly speaking a property of the nervous system and the very marked variations we encounter in clinical cases are pathological variants, functional derangements, of the fundamental factors of a given personality; expressions of the same mechanisms to which normally the organism responds and makes use of in harmonious adaptations to experiences past or present, to circumstance and environment.

Our every day life is full of such adaptations as we endeavor to keep in harmony with our own special problems as they occur in daily experiences. In the war neuroses we find no departure of consequence from these mechanisms, the departures, if any, are in degree and not in kind. The phenomena noticed in our cases have been observed in cases occurring in civil life. Notably, in the traumatic and anxiety neuroses occurring

in operatives in coal mines, railroads, etc., in cases precipitated by automobile accidents, riots, cyclones, etc., in fact, emergencies of all kinds, including interference irrespective of the formidable features of the operation or the surgical pathology of the case.

The term shell shock came early into the descriptive medical literature of the war. As a popular title it became really "medical slang." It soon became recognized that as a title it was inadequate and carried with it great potential harm to combat forces. So much so, that Colonel Salmon, Chief Consultant, Division of Neurology and Psychiatry of the American Expeditionary Forces, in his wisdom cast the term or title in the discard. War neuroses was the clinical term used as covering facts essential and explanatory of the phenomena encountered in the syndrome.

Norbury Sanitorium.

ELECTRICITY IN ITS RELATION TO LIFE

ED. L. DAVIS, M. E., M. A. I. E. E., Schenectady, N. Y.

The philosophers and learned men of all ages practically with one accord agreed that the solution of the great problem of the Universe was exemplified in the expression of a single principle, namely—VIBRATION.

This theoretical and hypothetical assumption has gradually developed into a coherent fabric built up from the logical deductions of the actual study of the facts, so that what was once an academic postulate in the past has now become a modern scientific formula applicable to all forms of physical phenomena. It is consequently possible, in the application of this principle, to analyze and determine what life and electricity relatively are, the similarity of their characteristics and the reaction that follows when the latter is brought in contact with the former or within the range of its influence.

WHAT IS LIFE? Life is the manifestation of vibration of the living cells of the body's component organisms. The rates of these vibrations vary greatly in oscillatory frequency, from enormously high to very low, depending upon the function involved. The vibratory rates under immediate discussion extend in continuously increasing velocity to a point almost inconceivable to the lay mind. As to those effecting the senses, the highest is that involving sight in its perception of light waves, for the eye can recognize oscillations whose speed reaches many trillions per second, up to the limit of the visible violet end of the spectrum. There are relatively slower speeds conceivable to the senses up to 40,000 per second for the ear; common sensation goes much higher, for heat may be estimated by the sensory peripheral apparatus, the so called temperature sense. The lowest rates of all are those vibrations that impress the sense of feeling.

Regarding the function of sight, the human eye is so constituted that the lowest rate of vibration appreciable is 500 trillions, recognizing the red rays, while the highest rate appreciable is 750 trillions per second revealing the violet rays. A further increase in the number of vibrations per second gives the ultra-violet rays which are invisible, their presence only being made manifest by their fluorescent effect upon certain substances. A still further increase in the number of vibrations gives the radium eminations and still further the x-rays. Neither the rays from radium nor the x-rays stop to excite any of our senses but pass directly through all substances according to their specific densities. While the rates of their vibrations transcend the perceptive capabilities of the sensory organs, still they possess the ability to call forth reactions for good or ill upon all living cells.

When a tuning fork is struck or a string upon a piano or violin is set vibrating, the human ear recognizes it as sound. In order to recognize continuous sound, the vibrations must be at least 18 per second. If fewer in number there is not a continuous sound, as far as the human ear is concerned. Vibrations may reach the sum of 40,000 per second and still be audible, but if they exceed this number, the organs of Corti are no longer able to vibrate in harmony with them and there is silence. In other words, there is no reaction by the cells composing the human auditory mechanism to vibrations below 18 per second nor above 40,000 per second.

It is thus seen that the nerves of the eve and ear respond only to rates of oscillations falling within certain well defined limits. A muscle will respond to individual stimuli up to about thirty vibrations per second. As muscular contractions and relaxations require time for their performance, when the rate of stimuli is higher than thirty per second, there is not sufficient time for complete relaxation and the muscle assumes a condition of tetanus. This tetanic condition becomes more and more manifest as the oscillations increase in frequency until they reach about 3,000 a second and is stationary or at its maximum up to 5,000 a second. If the rate of vibration be still increased, the muscle gradually returns to a flaccid condition because it can no longer respond, it no longer appreciates the stimulus, consequently there is no myological

These facts tend to prove quite conclusively the vibratory theory of all living cells. Biologically all cells are fundamentally alike, they may differ in construction, size or function, but their vibration is their manifestation of life, their rest is death. Since the function of a cell is governed by the rate of its vibration, it is unquestionably susceptible to and influenced by vibrations that may be induced through electrical nodes.

It is therefore demonstrated that vibratory nerve energy is the dominating power within the body without which life would not be possible. Every tissue, cell and organ in the body is dependent upon it in carrying out its functions. Any abnormal condition is the result of interference with the vibratory nerve transmissions upon which every organ depends for its vital force.

This conception of vital existence replaces many confusing theories regarding the cause and nature of disease with facts that are logical, demonstrative and easily understood. It must be admitted that the normal body is a perfect machine and it is also evident that so long as each part sustains its normal degree of functioning it is sufficiently supplied with power and can not be otherwise than in a state of health. Although the vibratory energy that operates the human mechanism is ordinarily adequate for its purpose, it nevertheless follows that any excess, deficiency or irregularity, each of which means some form of disease, must be corrected before these disordered conditions will disappear. be able, through electrical modes to produce and apply a type of symbolic energy to the body, similar in vibratory action to that by which its capabilities are maintained, means the continuance of its normal activity, which is health.

WHAT IS ELECTRICITY? Electricity is the manifestation of vibration of the ether in unstable equilibrium. Many theories concerning its nature have been advanced, but the latest, the electron hypothesis, furnishes the most plausible explanation of electrical phenomena. This theory assumes all matter, gaseous or solid, as consisting of molecules, each of which contain a great number of atoms, these in turn composed of a like number of electrons and that a certain arrangement and movement of these electrons constitute that subtle something called electricity.

While it is conceded that we do not know what electricity really is, research, experiment and study have so well determined the laws that govern its action that a knowledge of the science enables those qualified to apply this most wonderful force in nature for the body's benefit and make it the world's most comprehensive and valuable therapeutic agent.

Electricity in its Relation to Life

As has been shown, life depends upon vibration for its existence, and that any departure from the normal rate in any part developes disease. A total loss of vibration means death. Life, therefore, may be physically considered as vibration and electricity, from its nature, as the quintessence of vibratory energy. All scientists

agree upon the intimate relation of electricity to human existence, some going so far as to assert that electricity is life. It is known that the living body is constantly charged with vital electricity and in its continuous struggle against disease, electricity is always fighting on the side of health. It always operates toward the normal and against the abnormal, thus supernormal as well as subnormal conditions submit alike to its corrective influence. Electrification, scientifically applied to the human body, is a great equilibrator.

Electricity, through proper transformation, can be made to give an immense number of vibratory frequencies, sufficient to include the whole range essential to vital existence, and even very much higher, such as produce the x-rays. Plainly then, only in electricity have we an agency that can be made to conform to the extraordinary vibratory frequencies of the body's organisms and work in harmony with their vital functions, for it has abundantly demonstrated its power to produce physiological reactions that are followed by marked therapeutic effect. It goes without saying, however, that a thorough knowledge of the reaction upon the living cells to this agent must be the guide in the selection of the suitable mode to apply.

All life is dependent upon the electrical conditions that surround and obtain within it so that it is possible to restore the equilibrium of the body, that is health, by applying electrification from some outside source. The body contains a net work of lines. called nerves, for the transmission of these vibrations to every part of its area. In health, these nerves are all in a state of normal vibration due to the currents of vital electricity that traverse the body in every direction and when a nerve loses its vibratory action its function is impaired and degeneration begins. The nerves carrying these electrical currents have each their own rates of vibration and will respond to none other so that should a nerve become impaired it can be restored and will again take up its normal rate when brought into an area of electrical vibration equal to that of its own. With the wide range of vibratory frequencies possible with electrical transformation, from a limited number to many millions a second, any impaired nerve will take up the rate of vibration requisite to its normal restoration. So it is with every organism, there is a certain definite vibration frequency essential to normal functioning, the disturbance of which is always followed by a reaction prejudicial to good health. The natural inference to be drawn is, that disease may be held in abeyance so long as the body is kept up to its normal state of functioning either through its own individual effort or, failing in this, resorting to the assistance of some form of electrification, whenever needful.

A fact to be emphasized is that the continuance of good health depends upon the resistance of the body to disease conditioned upon maintaining the normal balance of its electro tonus so that nature may do her work uninterruptedly. With an unimpeded flow of the normal vibrations to the nerves that control the functions of the body, between the brain and the tissue cells, health maintains. Where there is interference with the transmission of these vibrations the rational means of restoring them to their normal state is by the application of some suitable mode of electrification that will cause them to again resume their healthful functions.

A mode of application, therefore, possessing the physical characteristics of the living cells of the body and which co-operates to establish correct and normal relations in its disordered functions, always tending toward that end and without impairing any sound or healthy organism or producing any harmful after-effect can not be otherwise than ideal and safe.

This marks the limit of man's control over the physiological organisms of the body for, in the last analysis, nature is the great healer yet she welcomes, appreciates and responds to any intelligent aid extended.

The Law Is Plain-Missouri's new venereal disease law is plain. It makes it the duty of the state, county, and municipal officers or their authorized agent within their respective jurisdictions to act when in their judgment it is necessary for the public health, to make examinations of persons convicted for sex offenses and to detain such persons until the results of such examinations are known. Syphilis is declared to be a family disease in Russia, and largely responsible for that country's decline as a nation. Do we want the United States, and particularly Missouri, to be menaced by such conditions as present themselves in Russia? Efforts of the public service and cooperation of the public in the work it is doing at this time, will accomplish the aim and serve the end in view. The stamping out of venereal diseases.

What Is Autohemotherapy?—Dr. J. A. Burnett, of Crum Creek, Okla., answers, in April Medical World: "Rogers now charges \$300 for teaching 'autohemotherapy,' and there is nothing to it except to take 10 drops of blood from a vein, reduce it to the sixth homeopathic dilution or lower, and inject 10 drops of the dilution intravenously once every few days or not repeat it as long as patient improves, as is the case in prescribing high potencies in homeopathic practice. A physician that is big enough sucker to give \$300 for such a course, besides a visit to Chicago, is certainly to be pitied and should be treated by an expert alienist."



Class "A" for Kansas City Hospital — St. Joseph Hospital, Kansas City, Mo., has been given class "A" rating by the Council of Medical Education of the American Medical Association

May Come to Overalls?—Members of the El Paso (Texas) County Medical Society have agreed to buy no new clothes until the first of August.

Bread Cast Upon the Waters—The results of advertising are oftentimes not apparent for many years. A case in point was related by the Iodium-Miller Company of Kansas City, which sent out some postal cards more than four years ago on its Soluble Iodine. Recently, one of these cards was returned, asking for a sample, by a doctor in Galesburg, Ill. The doctor probably was in the service of his country and had this postal locked up in his desk all the time he was away.

Millener to Mars—Here is a morsel from Arthur Brisbane's facile pen: "Dr. Millener, a scientist who wants to talk to Mars, is delighted, although Mars does not answer. That means nothing. Every time you pass a cradle the baby tries to talk to you. It doesn't know how. you talk baby talk and pass on. We don't even know what it is that separates us from Mars. It would be worth your while to read Lodge's book on 'The Imponderable Ether,' written in the days when he was still a scientist, before he took up spiritualism, the harmless indoor sport of semisenility."

A Sanitary Experiment in Philadelphia—In 1913 the Henry Phipps Institute leased a small group of houses, of a type generallly regarded as the worst in the city. The Institute improved the property from the point of view of sanitation and outward appearances. The tenants were all foreign born; and a nurse was put in charge of educational work among them. The experiment was continued for three years, at the end of which time the Institute gave up supervision of the property and returned its management to the tenants. Landis, who communicates the details of this work and who illustrates his paper with several pictures of the property at various times, voices his surprise that in general the tenants have maintained the improved conditions to a much greater degree than was anticipated, since the houses passed out of the control of the Institute. Whatever lapses have occurred have manifested themselves largely in the absence of the aesthetic effect rather than in a reversion to faulty hygiene —Landis, in Review of Tuberculosis.

Surgeon's Mask for Those Who Wear Glasses
—The remedy proposed by C. E. Locke, Jr., San
Francisco (Journal A. M. A.), is a narrow strip
of adhesive tape sewed adhesive side up to the
upper edge of the mask on its internal side. This
sticks the mask to the bridge of the nose and
under the eyes. Thus the mask is prevented
from sliding, and also the warm breath is prevented from passing upward and condensing on
the glasses, rendering them more translucent than
transparent. Another more simple method of accomplishing the same result is by the use of a
strip with a double face of adhesive tape, such as
is made by Johnson and Johnson, to secure wigs
to the head.

What Should Be Taught About Prevention— Tuberculous infection is peculiarly malignant in infants and young children. Therefore, writes W. J. Dobbie of the Toronto Free Hospital, Western Ontario, the young child must be absolutely protected against infection, to such an extent, indeed, that he would advocate the following two radical measures: (1) A tuberculous mother must not be allowed to come in contact with her child during its first three years, and (2) if the father is tuberculous he should not live in the house so long as there is in the house an infant under three years of age. While immunity is being developed, older children should be carefully protected against disease. We should adopt a more rational attitude toward the adult consumptive. Needy consumptives should be provided with maintenance assistance, not only in institutions, but also at home. The incorrigibly careless patients should be detained in institutions. Dobbie, W. J.: The Prevention of Tuberculosis. What We Should Teach Today. American Review of Tuberculosis.

EDITH CAVELL Brussells Dawn, October 12, 1915.

A monument to Edith Cavell (the British nurse who was shot by the Germans at Brussells) has been erected in Charing Cross Road, London, just off Trafalgar Square and almost under the shadow of the Nelson monument. The unveiling ceremony was conducted before a huge crowd by the Queen Mother, Alexandra, being the first act of state she has performed in London since the death of her husband, King Edward VII. The monument -is of gray granite and stands forty feet high. On the four panels are the words, Humanity, Sacrifice, Devotion and Fortitude. On the back is the British lion trampling on a serpent and above it are the words: "Faithful Unto Death." The statue, of white marble. shows Nurse Cavell standing erect in her nurse's uniform.



"Let's make the best of life we can, Nor render it a curse, But take it as you would a wife— For better or for worse."

One eye a necessity—two a luxury.

How many calories in a kilogram of alfalfa officicalis?

The impartial test of time frequently robs us of our splendid results.

A sneeze is an explosion of wind through the nose and is said to be a cure or preventive of adenoids. What next?

Seasickness can be prevented by tightly plugging the external auditory canal with cotton. Noses may also be occluded.

The first and last and closest question is: What do you like? Tell me what you like and I will tell you what you are.—John Ruskin.

Remember, on every occasion which leads thee to vexation, to apply this principle: That, though this be a misfortune, to bear it nobly is good fortune.—Marcus Aurelius.

Sometimes a board of health is really efficient, and as a reward such board is promptly discharged. St. Joseph furnishes a warning. Give the mayor the psychological test.

Probably the earliest account of hypnotism. as a therapeutic agent, dates back to the Egyptian medicine of 1552 B. C., as revealed by the Eber's Papyrus which describes physicians of that period as healing patients by the laying on of hands.

Notice to the Surgeons—That the laryngological section of the New York Academy of Medicine have printed on the program of each meeting the following notice: "Patients presented before this section may be recalled at a subsequent meeting by notifying the secretary."

Dr. Crofton of Chicago—"I wish to say, here, that I am of the opinion that all bacterial diseases really are only secondary diseases and must depend upon some primary factor, and that bacteria, as an organic entity, can do no harm, unless the conditions of the body warrant their multiplication. That they live on our skins, also, that they are present on the mucous membranes of our respiratory system, nobody can deny; and who can say that we do not also carry filterable viruses in these locations?

Continuing "The Medical Fortnightly and Laboratory News."

The Medical Herald

and Electro-Therapist

Incorporating the

Kansas City Medical Inder-Lancet

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Vol. XXXIX

MAY 15, 1920

No. 5



The New Orleans A. M. A. Meeting

The New Orleans meeting—1920--of the A. M. A. has passed into history. It was a pleasant meeting, profitable and filled with delightful events—scientific or sightseeing every hour. While the hotel capacity was lacking, private homes were available, and the few lobbies made social life more concentrated and trysting places less disseminated. New Orleans is a fine old city. The weather, excepting one rainy day, was delightfully cool. There were 3,650 men in attendance, the one lacking factor was the eastern men. They are not good travelers. While many of the prominent men of the east contributed heavily to the section meetings, the absence of many others was noted. The Missouri Valley men were in evidence as essayists and debaters. Kansas City, Omaha, Des Moines, Lincoln, and St. Joseph were well represented. The section meetings were very well attended in rsponse to very attractive programs. The gastro-enterologic, the most recently created section, registered over 200 men. Presided over by Smithie, the program arranged by Soper included Mayo, Ochner, Einhorn, Hirschman, Bassler, Ivy, Case and Simon—the attendance was what the program demanded. The entertainment features were in harmony with the proverbial southern hospitality. There were river trips, auto rides and evening fete champatre, a madi gras reception for the president followed by a mask ball, little lunches and grand dinners galore. president at his reception appeared in dire need of assistance from his marines, over six thousand people crowded into the hall and while almost suffocated by the jam, the sea of dress suits and beautiful bare shoulders presented a picture beautiful and happy. President William C. Braisted was abundantly received. The next president to be feted, crushed, honored and entertained will hold his reception in Boston in 1921. Dr. Hubert Work of Pueblo, Colo., late speaker of the house of delegates, was elected president for the coming year.

Those who failed to attend the 1920 meeting missed more than they know. New Orleans is the one city more than any other in our country which links us with Europe of the last two centuries. The old French and Spanish cathedrals, the unique cemeteries, the old houses, streets, people still maintain an atmosphere essentially of the aesthetic French and chivalrous Spanish. While walking down narrow Royal street with its ancient balconies and French shops it requires no imagination to feel oneself in the land of Napoleon. The 40 miles of river docks, the wonderful water system, the modern drainage plant, the general atmosphere of modern sanitation from so many points of view have cencentrated their influences in transforming the dear old southern city into a place of happy, serene, healthy residence. We all enjoyed it. Let's go to New Orleans again. J. M. B.

Western Electro-Therapeutic Association

The annual meeting, under the presidency of Dr. B. B. Grover, will be held at the Little Theatre, Kansas City, Mo., Thursday and Friday, May 27-28. An excellent program has been prepared and a cordial invitation is extended to the medical profession of the Missouri Valley and Southwest. This association was formed for the express purpose of bringing together those members of the profession in this section who are interested in physic and electro-therapy. At this meeting the progress of these specialties during the past year will be brought out and the discussions will emphasize the importance of cultivating and promoting knowledge in whatever relates to the scientific application of electricity and other physical measures to the practice of medicine and surgery. Membership in this association will be limited to men of good standing in their respective county and state societies. Preliminary program follows:

Dr. Burton B. Grover, Colorado Springs, President's Address..

Dr. Jefferson D. Gibson, Denver, "Treatment of Tuberculosis."

Symposium on Light Therapy, Drs. J. H. East, Denver; Lynne B. Greene, Kansas City; Charles Keown, Independence; E. H. Skinner, Kansas City.

Dr. H. W. Nye, Osborne, Kansas, "Treatment of Goitre with Report of Case."

Drs. C. (). Donaldson and G. E. Knappenberger, Kansas City, "X-Ray and Radium in the Treatment of Deep Malignancies."

Dr. W. E. Wolcott, Omaha, Neb., "Bristow Coil in Orthopedic Surgery, Experiences in the British Reconstruction Hospitals."

Dr. A. C. Clasen, Kansas City, "Mediastinal Affections, Radiological Diagnosis."

Dr. H. Winnett Orr, Lincoln, Neb., "Revision of Postion in Unsatisfactory Fractures, the Value of Electro and Physio Therapy in the After Care." (Lantern slides.)

Dr. James Y. Simpson, Kansas City, "The Effect of the Sinusoidal Modalities in the Treatment of Functional Stomach Diseases."

Dr. O. J. Cunningham, Kansas City, subject unannounced.

Dr. Clinton K. Smith, Kansas City, "Cancer of the Prostate; Diagnosis and Treatment."

Dr. D. T. Quigley, Omaha, "Traumatism and Transplantation in Cancer."

Dr. H. H. Bowing (Mayo Clinics), Rochester, Minn., "Radium and X-Ray Therapy in Inoperable Cancer of the Cervix"

Dr. Walter E. Scott, Adel, Iowa, title unannounced.

Dr. Theo. F. Clark, Eldorado, Kansas, "The Importance of Electromechano-Therapy in Neuritis and Muscular Atrophy."

Dr. E. E. Shaw, Cameron, Mo., "Report on Continuous Currents."

Arrangements are being made for a series of medical and surgical clinics at the General Hospital each forenoon during the week.

Dr. Grover will give his second course of lectures in electro-therapy at the Little Theater on Monday, Tuesday and Wednesday (preceding the meeting of the association).

The Cure of Syphilis

The writer, as an ophthalmologist, has two patients, in the latter thirties. with Argyle-Robertson pupils, and both have one dilated pupil and one did have paralysis of accommodation in the left eye when I saw him. Both had syphilis about ten years ago and both received some treatment for a year or two, and until the arrival of

these ocular symptoms neither one was aware that he had not been cured of his disease.

The question arises, what to do in the line of treatment, and will the treatment prevent general paresis or tabes?

These men were treated before the days of salvarsan. These long intervals between treatment and no symptoms of the disease noticeable by the patients suggests the so-called cure after an intensive treatment of salvarsan alone or in combination with hg.

The writer is of the opinion that syphilis is incurable and that proper treatment will lengthen the patient's life, and if it does not succeed in preventing complications it will at least postpone them.

Writers on the subject cause the unwary to believe that our increased knowledge of the disease and our new arsenic preparations intravenously injected, guided by the blood and spinal fluid tests, do conquor this disease. The profession, high and low, has been and is always crowded with star-gazing idealists, and what they wish to be true, of course, is true. As to the cold blooded facts, and away from pleasant delusions, what is the result of present day methods?

The present day conception takes too narrow a view of the field with which medical science has to deal. It assumes that instrumental methods are of necessity the only scientific methods. There are phenomena in medicine which the scientific instruments of today, however delicate, can neither register nor measure, and there are methods necessary for the investigation of disease which no laboratory experience can supply.

Take the test of time. One patient received treatment for one year ten years ago. For nine years he was practically well, until the dilated pupil and paralysis of accommodation nine years later. Up until this stiff dilated pupil, what a record it would have made for salvarsan if it had been used. That spirochetes remain latent in the tissues of the body for nine years and then suddenly cause an active destructive process is most unlikely.

There are those who believe that by an early diagnosis and early proper treatment the syphilitic virus could be destroyed and the patient considered cured and permitted to marry and procreate children, provided he was free from manifestations and his blood and fluid reactions were permanently negative. How many years after the infection must a patient be watched and his blood reaction remain negative before it is permanently negative?

What of the report of many cases of infection where for five or six years no symptoms appeared and the Wassermann reaction remained negative for that period, but suddenly became positive.

Is it not necessary to watch an individual for the remainder of his life?

How can any man with his method or drug pronounce a syphilitic man cured?

We are told that the proof of cure rests on the permanence of a negative Wassermann reaction, on the freedom of symptoms, and on the frequent occurrence of reinfection. The only positive proof of cure is a fresh infection. As an index of the complete spirochetal disinfection of the patient, a negative Wassermann test at a given moment is relatively useless.

Fordyce, of New York, says: "The patient was discharged as cured if his Wassermann was negative for a year and remained so after a provocative injection of salvarsan, and his spinal fluid was negative."

Collins found 467 Argyle-Robertson pupils in 790 cases of syphilitic disease of the nervous system. In 25 years he has never seen such a pupil in a non-syphilitic. This stiff pupil is to herald in advance the coming of tabes and general paresis, while Collins cites instances of 22 individuals who have had such pupils for upward of five years and no active syphilitic disease of the central nervous system.

Wolbarst, of New York, holds that the Wassermann test and the gonorrhea fixation test should be made by at least three serologists working independently, that the serum should be taken simultaneously and sent to the different laboratories under identical conditions, and that one serologist is not to be depended on, however capable he may be. From the observations detailed, the writer finds that three serologists will agree in approximately fifty-three per cent of Wassermann tests and approximately forty-two per cent of gonorrhea fixation tests. In other words, the chances are about fifty-three in a hundred that three serologists will agree on any given serum. Curiously enough, they are more likely to agree in the negative cases than in the positive cases. This study emphasizes the point that more attention should be devoted to the clinical features of the cases, not trusting so implicitly on the laboratory workers for diag-P. I. L.

A Suggestion for a State General Hospital at Columbia

At a recent meeting of the Missouri State Medical Association, Dr. F. G. Nifong, of Columbia, made an earnest, sensible plea for a State General Hospital in connection with the idea of providing a four years' medical course at the State University. Dr. Nifong's salient points are as follows:

Modern medicine and the hospital idea in medical service are inseparable. Hospital and health service is one of the functions of the state

for the promotion of the general welfare and it is also the business of the local communities and counties. This matter is not second in importance to education. The county general hospital is a crying need for our more populous counties, no less needed than in our cities. The obligation of the state to give its citizens higher and technical education is a well established principle The general welfare can be promoted in no better way than by furnishing the best possible medical education to its citizens. We need a great medical center in Missouri University both for undergraduate and for graduate work. The medical department of the university should cooperate with the state board of health in all its activities. To accomplish the various purposes, the state medical department must have adequate clinics and hospitals. A state general hospital articulated with various county and other standardized hospitals would furnish exceptional and unique clinical facilities. This would bring all the people and profession of the state into intimate touch with all health matters and health service.

The state association has asked Governor Gardner and the state legislature to adopt measures making this plan possible.

New Disease Baffles—A new form of encephalitis lethargica erroneously called "sleeping sickness," is taking appalling toll among children in Vienna, according to reports received from the American Red Cross mission there. The disease, which thus far has defied the powers of medical science, is caused by the germ of influenza and attacks the brain of its victim. The sufferer is left stupefied and terribly emaciated. One child victim, aged seven, weighed only 29 pounds at death. Fighting against the almost insurmountable obstacles presented by lack of medicine, supplies and food, Red Cross physicians have sought to stop the spread of the disease. Hospitals in Vienna, it is said, are overcrowded, as a long period of convalescense is required for those who recover. The extraordinarily cold weather of the Austrian winter is thought by medical men to have contributed to the prevalence of the epidemic among children. Without food and proper clothing, and in a greatly weakened physical condition, they quickly succumbed.

China Needs Medical Aid—According to Dr. Mary Stone, who is in the United States for the purpose of raising subscriptions for medical dispensaries in China, there are only 450 physicians in the country for a population of 450,000,000. Dr. Stone conducts a hospital and dispensary at Kiu-Kiang, China.

For diarrhea of infants with colic and vomiting, common table coffee in teaspoonful doses, excellent.



ALL ABOARD FOR KANSAS CITY!

The Western Electro-Therapeutic Association will hold its annual convention at the Little Theatre May 27-28.

Of course you are going and if your medical friends only knew about the wonderful program that is to be presented at that meeting you could not keep them away, so be sure to invite them to attend. A most cordial invitation is extended to all medical men and women in the "Missouri Valley" which means all the territory between sunrise and sunset!

Do not fail to attend the business sessions each morning when action will be taken that not only concerns every member but the vital interests of the association itself.

Physiotherapy is growing by leaps and bounds. Get aboard for the next regular train will not be due until May, 1921!

TREATMENT OF PRURITUS ANI BY X-RAY RADIATION

(By William J. Young, M. D., Louisville, Ky., American Journal of Roentgenology, Feb. 1920.)

In an excellent paper the doctor says in part, "In the treatment of pruritus ani during the last four years I have depended entirely upon fractional doses of x-ray given at weekly intervals, the dosage being governed by the infiltration of the anal tissues, from four to ten radiations constituting the treatment. In the cases treated the results have varied from temporary improvement to seeming cure. My best results have been secured when working in conjunction with the proctologist, my part consisting of relieving the pruritus while he was striving to correct the particular ailment which operated as a causative factor."

His conclusions are:

1. That in x-ray therapy we have a valuable adjunct in the treatment of pruritus ani.

2. That when causative pathology exists higher in the rectal canal, radiation may be successfully used to control the itching.

3. That so long as the pathology continues in the rectal canal requiring treatment by the proctologist, the pruritus ani may persist.

4. That x-ray therapy in pruritus ani should be directed by a skilled operator who has definite knowledge concerning the course of the lesion and also the effect of radiation upon the tissues about the anal region.

Sun Treatment—A new method of applying heliotherapy by means of a lens was called to the attention of R. W. Lovett, Boston (Journal A. M. A., April 3, 1920), in the spring of 1919, and he reports the results in a series of carefully observed cases of chronic suppuration in a children's hospital. It had been used by a Mrs. E. C. Post in her sanatorium at Porsmeur, in Brittany. it having first been suggested to her by M. de Thezac. The essential of the treatment is the concentration of the sun's rays by means of a double convex lens, diameter, 12 inches, and focal length 6 feet. At the focal point, of course, the heat is too great, and in general the patient should be placed at a point where the sun's rays form a circle from 3 to 5 inches in diameter. As the patient is moved away from the lens, of course, the heat increases, and the nearer he is to it decreases. Moving it thus back and forth is the method of regulating treatment. The lens is mounted a few inches from the end in a canvas cylinder, one foot in diameter and three feet long. The advantage of the cylinder is that it enables the lens to be pointed directly at the patient and makes the application more definite. The cylinder is on a tripod and can be turned in any direction. The duration of treatment must lengthen progressively, at first, five minutes, increasing five minutes each day until a limit of thirty minutes is reached. In one case a longer period, up to one and one-half hours, was used without harm. The skin around the wound is, as a rule. protected by towels, and the operator wears colored glasses. One treatment a day was given. "The effect of the treatment on suppurating wounds was perfectly definite: (1) The discharge immediately increased and then diminished; (2) the granulation took on a healthier color if the patient was anemic, and (3) sensitiveness diminished. In order to test the efficacy of this treatment, a series of suppurating wounds of the severest type were selected, and cases that were obviously difficult. In the wards in a hospital for acute cases it was necessary to select a more acute type than would have been the case in an institution for chronic diseases, as patients that were doing well were discharged to the convalescent home on account of the need of beds. and chiefly the chronic suppurations that were resistant remained long enough to be observed under this treatment." A dozen cases are reported, all observed by members of the staff. In Lovett's opinion, and that of his associates. greater progress was made with this method than in those cases treated by other means. In two acute osteomyelitis cases, in which it was used within a week after operation, it seemed too stimulating. Bacterial count was made in all cases at short intervals, and showed that it was lowered immediately in the discharge.

ELECTRO-THERAPEUTIC WEEK IN KANSAS CITY

At the Little Theatre, May 24, 25, 26, 27 and 28, 1920.

SECOND LECTURE COURSE IN ELECTRO-THERAPY

by Dr. B. B. GROVER, May 24 to 26.

Dr. Jefferson D. Gibson, of Denver, will give a special demonstration of his technic in the treatment of pulmonary tuberculosis.

Classes are now being formed. Number limited.

Western Electro-Therapeutic Association, Annual Meeting, May 27-28. Send for program and registration blank. Chas. Wood Fassett, M. D., Secretary, Kansas City, Mo.

PROGRAMME—DR. GROVER'S LECTURE COURSE

LECTURE I.

Monday 10:30 a. m.

What is electricity? Progress of electricity; energy; classification of electricity; potential, voltage, amperage, ohms and watts.

LECTURE II.

Monday 2 p. m.

Electrons; types of primary cells; more about volts, amperes and ohms; electric meters; rheostats and resistance; conductivity; magnets and magnetism; electro-magnetic induction; self-induction; motor-dynamo; transformers; electrolysis; ionization.

All subjects illustrated by lantern slides. Demonstration of apparatus.

LECTURE III.

Monday 8 p. m.

Galvanism; physiology; electro-diagnosis; shotgun therapy; ionization in gonorrhea and gynecology; faradism; wall plate; static electricity; physiology; prostatic drainage and therapy; static technic; care of machine, etc.

Lantern slide illustrations.

LECTURE IV.

Tuesday 10:30 a. m.

High frequency currents; a true d'Arsonval apparatus illustrated; physiology; fulguration; desiccation; electro-coagulation; bladder tumors and technic of treatment; tennelling a prostate; electrodes; auto-condensation technic; sinusoidal currents; lateral curvature; intestinal stasis; indicanuria. Lantern slides.

LECTURE V.

Tuesday 2 p. m.

Blood pressure; physiology; effects of drugs; arterio-sclerosis; the sphygmomanometer; methods of taking blood pressure; phases; pulse pressure; normal blood pressure; blood pressure in surgery, obstetrics and disease; lantern slides; demonstration of apparatus.

LECTURE VI.

Tuesday 4 p. m.

Dr. Jefferson D. Gibson will lecture on "How Tuberculosis May Be Cured," with details of technique.

(This lecture alone will be worth the fee charged for the entire course.)

LECTURE VII.

Wednesday 10:30 a.m.

Hyperpiesis, its essential features distinguished from hypertension of nephritis and arteriosclerosis; its early manifestations and treatment; lantern slides, illustrating different phases of hyperpiesis; genito-urinary diseases; electrotherapeutic methods of treating gonorrhea; skin diseases; ideal treatment of hemorrohoids.

LECTURE VIII.

Wednesday 2 p. m.

General diseases; goitre and its treatment; paralysis; rheumatism; urethral stricture technic; diseased tonsils, etc.; diathermy; physiology; how to secure hyperemia in any part of the body; pneumonia; inflammation and muscular spasm; cirrhosis of the liver; tuberculosis; vaso-motor disturbances; heart disease; bronchitis; demonstration of apparatus.

LECTURE IX.

Wednesday 8 p. m.

Pain; character of pain; bursitis; neuralgia and neuritis; differential diagnosis; headaches; backaches; examination of patient; roentgenology; roentgenologist and technician; x-ray machines; roentgenotherapy; x-ray dose; fractional, semi-intensive and intensive treatment; dermatitis; cancers, how treated; fibroids, how treated; skin diseases amenable to roentgenotherapy; tuberculosis. Lantern slides.

Tickets for entire course, \$25.00.

An exposition of electro-therapeutic equipment will be held in the Little Theatre during the week.

THE NOTION THAT ELECTRO-THERA-PEUTICS IN MEDICINE IS ESSEN-TIALLY PSYCHIC

The oft repeated statement by medical men, especially of neurologists, that electro-therapeutics is practically a psychic measure has arisen by the bungling and impractical use of the various currents by these men. The physician who uses electricity by modern methods looks with amazement upon the old text books on electro-therapeutics, and when he reads the medical works, particularly on nervous diseases, and observes the references made to the indication for the use of electricity, and the way in which they still employ it, is aghast, that no progress has been made by these writers for many years in the practical employment of an agent so potent for good.

This is an age of progress, and when we compare the commercial uses of electricity with its employment thirty years ago the contrast is amazing and so with electricity in medicine. It is safe to say that the present status of electro-therapeutics in the hande of those informed as to its effects, indications and technic for employing it, is in every respect keeping pace and progress with its commercial uses.

Electricity is undoubtedly the most important means for restoring functional conditions and arresting organic processes in medicine. This fact must be so conceded and acknowledged; that instead of the present attitude of those who know little or nothing of its properties and uses, and would reject its employment, will be confronted by an energetic propaganda by those who are familiar with its properties, uses and methods of application, and that then it may be brought into its true light and significance before the medical profession.

Let obsolete notions concerning ascending and descending currents and the psychic uses of electricity be placed forever in the background and bring forward the essential properties and principles of employing the agent most effective and scientific in the treatment of inflammation, defective metabolism and inert processes. To do this is the duty of every physician conversant with its important indications.

There is no field in medicine that offers greater encouragement for study and application than electro-therapeutics; therefore the medical man who awakes to its importance and takes up the work scientifically, is certain to be popular

with his patients, if not with the medical men who ignore it. The time is past when the subject can be treated slightingly, and the men who continue to assume this attitude will become more and more unpopular with their patients. This is manifested on all sides. On the other hand the medical man who assays to use electricity without knowledge of the principles and methods of application is dangerous to the community and a reproach to the medical profession, both to those who do and those who do not understand its uses.—The American Journal of Electro-therapeutics and Radiology, editorial June, 1917.

BIOGRAPHICAL BURTON BAKER GROVER, M. D.

President Western Electro-Therapeutic Association; fellow of the American Electro-Therapeutic Association; member of the Radiological Society of North America; American Medical Association; Medical Society of the Missouri Valley; the Solly Anti-Tuberculosis Society; Colorado Springs Clinical Club; El Paso Medical Society; Colorado State Medical Society, etc.

DR. JEFFERSON D. GIBSON

A graduate of the Medical Department University of Alabama; New York Polyclinic; New York Post Graduate Medical School; Apostolli Clinic, Paris; General Hospital at Vienna.

He is ex-professor of physiology, ex-president of American Association of Clinical Research, ex-president of the American Electro-Therapeutic Association. Now a member of the National Society of Physical Therapeutics, American Electro-Therapeutic Association, American Roentgen Ray Association, American Medical Association and many others.

There is no man in America who has a better understanding of electro-therapeutic and other physical methods of practice than Dr. Gibson.

Many years ago, while a resident of the sunny south, he contracted tuberculosis and was advised to go to Colorado. At the time of taking up his residence in Denver x-rays were coming into use as a therapeutic agent. Being an up to date investigator, he believed that the mysterious ray would have a profound influence in arresting the insidious process of tuberculosis. He took his own medicine (roentgen therapy) and made a complete recovery. He at once became interested not only in roentgenotherapy, but other electrical modalities as well, and now has to his credit over 1,500 cases of arrested and cured tuberculosis.

During the course of lectures to be held in Kansas City, beginning May 24, Doctor Gibson will lecture on "How Tuberculosis May Be Cured," and give each step in detail of the therapeutic technic.



March 17, 1920

The regular scientific session of the society was held at the Commerce Club Rooms, March 17, 1920. The President, Dr. Dandurant, called the meeting to order.

The minutes of March 3, 1920, were read and approved.

Motion by Dr. A. L. Gray that a committee be appointed to draft resolutions in regard to the death of Dr. Barton Pitts, seconded by Dr. Renaud, carried.

The chairman of Economics Committee reported on resolution presented by Mr. Bonham of the Physicians and Surgeons Exchange recommending disapproval of the plan. Motion by Dr. A. L. Gray that the resolution of Mr. Bonham be rejected, seconded by Dr. DeLamater, carried.

Motion by Dr. Pentz that Dr. Stevenson be granted the privilege of presenting a resolution at this meeting was seconded and carried. The resolution was as follows:

"Resolved, that our delegates to the Missouri State Medical Association be instructed to introduce and push forward a resolution to instruct our State Delegates to work in the American Medical Association for a determined effort to have medical fees for government work kept on a fee basis at adequate and regular fees and where a station is placed on a salary basis that the salary be approximately the average for that station if computed on a fee basis, and be it further resolved that we wish our parent societies to resist with all their power any attempt to cheapen either the remuneration or the prestige of the medical profession when doing government work in any capacity or at any time."

Motion by Dr. Kenney that the resolution be adopted as read, seconded by Dr. A. L. Gray. Amendment offered by Dr. Potter to add all railway, corporation, life insurance and contract practice, seconded by Dr. Pentz carried.

onded by Dr. Pentz, carried. Motion carried.
Dr. McGlothlan presented the invitation of Dr.
Porter E. Williams, asking the society to meet at
State Hospital No. 2, March 31, 1920, 7:30 p. m.
Motion by Dr. A. L. Gray that the invitation be accepted was seconded and carried.

Dr. A. L. Gray read his paper, "Accidental and Criminal Abortions—Diagnosis and Treatment," and it was discussed by Drs. Leonard, Spencer, Willman, Holley, Elam, Stevenson, Potter, McGlothlan, DeLamater and Ladd.

Dr. Renaud read his paper, "A Few Practical Points in Tonsilectomy," and it was discussed by Drs. Ferguson, Willman, Kenney, Leonard, Holley, Elam, Stevenson, Potter and DeLamater.

Adjourned 11 p. m. Attendance 31.

March 26, 1920

The society made record of a most interesting clinic held March 26, 1920 at Noyes Hospital. The attendance at this meeting was 32 and adjournment was at 11 p. m.

The subjects presented by the Welfare Board Staff were as follows:

Surgical by Dr. Doyle
Tubercular Peritonitis.
1 Inguinal Hernia.

2 Hysterectomies.

1 Prickle Cell Epitheliloma. Pediatrics by Dr. Ballard

2 Congenital Syphilis. Genito-Urinary by Dr. Bansbach

1 Enlarged Prostate. Medical by Dr. Carle

1 Chronic Asthma.

1 Non-septic Pleural Effusion.

Those present entered freely into the discussion. Dr. Dave Liberman, a visitor from Chicago, reported his experience with radium while connected with the service of the Chicago Physicians Radium Association.

March 31, 1920

The meeting of the society at State Hospital No. 2, March 31, 1920, as guests of Dr. Porter E. Williams, registered a representative attendance. Following the dinner Dr. Herman E. Pearse discussed the program of the movement for Hospital Standardization and urged that steps be taken immediately toward promoting this movement in St. Joseph. A series of clinics were presented and the meeting adjourned at 10 p. m.

April 14, 1920

The regular business session of the society was held at the Commerce Club Rooms, April 14, 1920. The President, Dr. Dandurant, called the meeting to order.

The minutes of March 17, 1920 were read and approved.

The committee on resolutions, consisting of Drs. C. H. Wallace, J. M. Dunsmore and J. M. Bell, presented the following relative to the death of Dr. Barton Pitts:

"Whereas it has pleased Almighty God to remove from our midst Dr. Barton Pitts of this society, a fellow practitioner, well beloved by all its members, be it resolved—that the Buchanan County Medical Society has sustained a profound loss of one of its honored members and fellows whose place it will be impossible to fill; that the Medical Profession of this city realizes its loss of a most progressive and prominent ophthalmologist and friend, whose affable smile and congenial fellowship were keenly appreciated, that St. Joseph observes with marked regret the passing of one of its prominent citizens whose uplifting power will be distinctly missed. Be it further resolved that the fellows of this Society extend their sympathy in our mutual sorrow to the wife and family of our departed friend and that a copy of these resolutions be sent to Mrs. Barton Pitts conveying to her our sense of profound sorrow in the loss we have mutually sustained."

Motion duly seconded, that the resolution be adopted was carried unanimously.

The treasurer reported a balance on hand of \$119.06.

The following bills were allowed and warrants ordered drawn for the amounts presented:

 The Secretary, postage
 \$10.90

 Lon. Hardman, printing
 63.73

 W. Schroeder Book Store
 3.75

Dr. McGill moved that a committee be appointed from this society to confer with the boards of directors of the hospitals in this city to aid in the standardization of these institutions, seconded by Dr. Ladd, carried.

Motion by Dr. Byrne that the members of this society call attention to solicitors that they must refrain from advertising in programs, class papers, state or county histories and similar publications, seconded by Dr. Wisser, carried.

Motion by Dr. Elam that this society go on record endorsing the service of Dr. L. J. Dandurant on the board of health and recommend to the mayor-elect that Dr. Dandurant be continued a member of the board, seconded by Dr. A. L. Gray, carried.

Motion by Dr. Potter that the society write a personal letter to all suspended members of this

society, seconded by Dr. Ladd, carried.

Dr. McGill moved that this society endorse the clean up week activities inaugurated by the Commerce Club and lend all possible assistance to further the movement, seconded by Dr. Ladd, carried.

Dr. Byrne reported a patient that had come under his care showing evidences of an attempted abortion. The patient later miscarried. Motion by Dr. A. L. Gray that a committee be appointed to investiate the case reported by Dr. Byrne, seconded by Dr. Elam, carried. The president appointed as this committee Drs. A. L. Gray, W. T. Elam and F. H. Ladd.

Dr. Stevenson reported a case of morphinism that had applied at the Welfare Board Clinic for treatment.

Dr. Ladd reported a case of meningitis of special interest.

Dr. Potter presented the subject of Lethargic Encophalitis. The discussion was by Drs. McGlothlan, Proud and A. L. Gray.

Adjourned 9:45 p.m. Attendance 29.

Oliver C. Gebhart, Secretary.

TUBERCULOSIS

Influenza and Tuberculosis-Amberson and Burns supplement a previous communication on epidemic influenza among patients and employes of the Loomis Sanatorium, Loomis, New York, with a further analysis of the histories of patients who had influenza before entering the sanatorium and a record of the incidence and fatality of this disease among former patients. They also give a critical review of recent literature on the subject. Of 1227 traced former patients 70 contracted influenza and 16 (22.9 per cent) died of the disease. Of 199 new patients admitted between November 1, 1918, and November 1, 1919, 42 or 21.1 per cent gave a definite history of influenza. Of these 42, 18 knew they had tuberculosis prior to their influenza, while 26 give a history of previous symptoms that were presumably tuberculous. In 12 cases the onset of tuberculosis was definitely postinfluenzal. The authors conclude that tuberculosis does not confer an immunity to influenza, that influenza is not less severe among the tuberculous, that among their own patients the case fatality was higher than among the general population, that among a certain number of individuals influenza marks the inception of pulmonary tuberculosis, and that to ignore or deny the possibility of pulmonary tuberculosis as a sequela is to unduly defer diagnosis and early treatment. Amberson, J. Burns, Jr., and Peters, Andrew Jr.; Influenza and Tuberculosis. A supplementary Report of Critical Review. American Review of Tuberculosis, April, 1920, Vol. IV, No. 2.

Sodium Gynocardate "A" in the Treatment of Pulmonary Tuberculosis—Sodium gynocardate "A" is a salt of chaulmoogra oil. It has recently been suggested as a possible remedy for tuberculosis. M. Biesenthal of Chicago has recently employed it in treating ten patients at the County Hospital and the Chicago Winfield Sanatorium. Not a single patient showed any improvement of signs or symptoms and there were no sputum changes from positive to negative. In two cases acute reactions followed the injections. Biesenthal, Max: The Use of Sodium Gynocardate "A" in Pulmonary Tuberculosis. American Review of Tuberculosis, April, 1920, Vol. IV, No. 2.

Dr. James W. Markoe, noted obstetrician, former physician to J. Pierpont Morgan, was shot to death by Thomas W. Simkin, an escaped lunatic, while taking the collection in St. George's Episcopal church, New York, on Sunday, April 25.

Holders of Certificates from the National Board of Medical Examiners will be registered without further examination in the following states: Alabama, Colorado, Delaware, Florida, Georgia, Idaho, Iowa, Kentucky, Maryland, Minnesota, Nebraska, New Hampshire, New Jersey, North Carolina, North Dakota, Pennsylvania, Rhode Island, South Carolina, Vermont, Virginia.

Dr. William George Logan died at his home in Kansas City, April 27, from injuries received in a fall in his bedroom a week previous. Dr. Logan was born in 1831, near Stanton, Ky. He was graduated from the medical department of the University of Louisville in 1852. He leaves besides his wife, Mrs. Mildred Logan, three children, Dr. J. E. Logan, Mrs. L. L. Means and Miss Frances Logan, all of Kansas City.

No Chicken—A surgeon who was very young and also rather shy was invited to dinner by a lady who was at least 50, but frivolous enough for 20. At dinner she asked the young surgeon to carve a chicken, and not having done so before, he failed lamentably. Instead of trying to cover his confusion, the hostess called attention to it pointedly by looking down the table and saying loudly: "Well, you may be a very clever surgeon, but if I wanted a leg cut off I should not come to you to do it." "No, madam," he replied, politely, "but then, you see, you are not a chicken."

In this issue of the Herald Dr. D. T. Quigley of Omaha announces the opening of a special hospital for radium treatment of cancer, tumor, goiter, etc. Radium is the only non-surgical treatment that has stood the test of time in this class of cases and as Dr. Quigley has devoted more than seven years to this work, here and abroad, it seems right and proper that the largest institution for radium therapy should be located in Omaha under his directorship. Dr. Quigley has accurate records of several thousand cases covering a period of seven years which seem to prove beyond a doubt that radium cures cancer in the early stages and is the best palliative in the late stage of the disease.

Spasmodic Campaigns a Waste of Good Money—Not long ago a manufacturer who needed the endorsement of physicians started a campaign which ran six months. He was bitterly disappointed because the 150,000 physicians of the country did not fall over themselves in sending him letters of appreciantion and endorsement. Convinced that this method was a failure, he has changed his plans and is turning his big guns on the consumer. His mistake was in assuming that a professional man holds his opinions lightly, and is willing to make up his mind regarding the merit of a product which he may be called upon to use in his work—the most important thing in his whole life—without complete and absolute knowledge regarding it. Professional endorsement cannot be bought; it must be won.

CURE FOR SPRING FEVER

Do not let this lazy weather
Take away your energy;
Practice dodging flivvers daily—
Since such exercise is free.
All pedestrians should try it
In some crowded city street,
There is nothing else can make one
Quite so light upon his feet.

DROPSY

Indications:

Dropsy of any origin.

Bright's Disease,

Valvular

Diseases,

Heart Trouble following Influ-

enza, Cirrhosis,

Anasarca.

This is an advertisement of our sole product, into which we put all our efforts to produce as nearly a perfect remedy as possible, for just two of the many ailments of humanity which you are called upon to treat.

DROPSY AND HEART DISEASE

ANEDEMIN doesn't always relieve even these, but it will give you a better result in a greater number of cases than any other remedy, and do it without danger to your patient and with no bad after-effects. It has no cumulative action and produces no stomach disturbance; is a powerful diuretic without irritating.

Sample, literature with formula to physicians.

ANEDEMIN CHEMICAL COMPANY, Chattanooga, Tenn., U. S. A.

Anedemin Chemical
Company, Inc.
Chattanooga, Tenn.
Send sample and booklet.

Name	М.	D
City		

Che Doctors' Library "Next to acquiring good friends, the best acquisition is that of good books."—C. C. Colton.

THE PRINCIPLES AND PRACTICE OF ROENTGEN-OLOGICAL TECHNIQUE—By L. Seth Hirsch, M. D., Director X-Ray Departments Bellevue, Fordham, H rlem and Gouverneur Hospitals, New York City, with Three Hundred and forty-three Illustrations and Twenty-two Tables. American X-Ray Publishing Co., New York, Publishers. Price \$10.00.

The book is divided into two parts, part I being devoted to the principles of technique; the other part II, goes into the details of application of the principles of technique and methods of roentgen examination. It covers in detail without superfluous words, the entire subject of roentgenological theory and practice. The author has accomplished the feat of covering the entire field in two hundred and thirtythree pages. The first chapter is devoted to the principles of electricity wherein the modern or electron theory is elucidated. Chapters II, III and IV are devoted to apparatus the description of which is so clear and concise that one possessed of elementary electrical knowledge and the material could build an up to date x-ray machine. The few pages of chapter V covers the history of x-ray. Thirty-two pages are devoted to x-ray tubes, the different varieties being

NOTE—The Medical Herald's Kansas City office will supply any book reviewed in this department at publisher's price, prepaid. If an order for two books be sent at any one time, the purchaser will be entitled to a six months' subscription to the Herald. This plan is arranged for the convenience of our readers, and we trust it will stimulate trade in the direction of good books.—Editor.

fully described and illustrated and the properties and production of x-rays explained. The chapter on measurement of x-rays contains a clear and concise statement of the various methods of measuring the quantity and quality of x-rays. The author has been able to clear the mind of confusion concerning the many methods which have been in use for the estimation of an x-ray dose. The last chapter treats of laboratory methods which reflects the author's intimate knowledge of the subject. The book is of inestimable value to all who are doing x-ray work. It is a masterpiece in x-ray literature.

B. B. GROVER.

A TEXTBOOK OF CHEMISTRY FOR NURSES—By Fredus N. Peters, A. M., Ph. D., Author of "Experimental Chemistry," Laboratory Experiences, etc.; Formerly Professor Organic Chemistry Hahnemann Medical College, Kansas City Central High School, etc. Illustrated. St. Louis: C. V. Mosby Company, 1919. Price \$1.75.

Entering, as it does, into every phase of everyday life, chemistry will become more and more a popular subject. Concerning even the housewife, who may not have taken high school work, she may become acquainted with its intracacles if she will follow such a work as is herein presented-addressed to all seekers after knowledge in a very readable manner free from ultra scientific substances-matter, water, oxygen and carries one in easy stages to substances unknown. The practical phases of chemistry are everywhere remembered and emphasized, especially those that concern the great mass of humanity. While the book is dedicated to nurses, surely they will not complain if those who have had less training may grasp it. It presents a review of the more common elements; includes the ordinary poisons and closes with a glossary and appendix of antidotes and incompatibles. The author is to be commended in thus extending a knowledge of the queen of sciences to all readers. J. M. B.

THE TEST OF THE TAMPON

The test of the tampon lies in the action and effect of the medicament it carries upon existing local inflammatory processes. Commonly used agents of this sort act only indirectly as a rule. DIONOL is something decidedly different. It acts efficiently because DIONOL reaches and affects local inflammation, acting in accord with the electro-pathology of this morbid process.

USE DIONOL ON TAMPONS

in the treatment of

Endometritis Ovaritis Salpingitis Cervical Ulceration Pelvic Cellulitis Cystitis Metritis Leucorrhoea Vaginitis

JUDGE DIONOL BY PERFORMANCE

The Dionol Co., Detroit, Mich. Dept. 27. Please send literature, Case Reports, etc.						

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864 Woodward Ave.,

Detroit, Michigan.

GERIATRICS—A treatise on senile conditions, diseases of advanced life and care of the aged. By Malford W. Thewlis, M. D., Assistant Editor Medical Review, N. Y. Introduction by A. Jacobi, M. D., L. L. D.; I. L. Nashcher, M. D., St. Louis; C. V. Mosby Co., 1919. Price, \$3.00.

There are those who decry specialties, and bewail their multiplicity. If humanity is to be benefited thereby; if knowledge be power; if by concentrated observation upon any focus the medical man becomes a better servant to humanity, let specialties multiply. Geriatrics is a new field, a worthy one, society needs men of years for counsel and their experience. In no volume has the subject been so beautifully outlined as in this one by Thewlis. A preface has been written by Jacobi, who may be called the father of pediatrics. His work began in 1860. He may well, with Nascher of New York, then father a new and equally important special field. As Jacobi declares, geriatrics includes not only the treatment of senile diseases, but also the care of the aged, the causes of aging and measures for prolonging life. The study of geriatrics should include persons about fifty, about that time when senile changes first become The foundation of such changes usually manifest. begin much earlier. The scope of the work is broad. It includes neglect, care, work of the aged; keep senile cases out of bed, care of the eyes, digestion, diet, kidneys, constipation, sclerosis, urine, chest conditions, sexual life, surgery, prostate hypertrophy, blood pressure, in all thirty-one chapters upon specific conditions. The book is delightfully readable, the style clear, the print good, illustrations numerous and the whole subject so scientifically presented as to be a classic upon the aged and aging. There is no field of medicine perused by any medical man but what the counsels contained herein will apply, since when we begin to live we begin to die. The volume may be read by any man of education to his advantage, be he doctor or layman. J. M. B.

THE ORTHOPEDIC TREATMENT OF GUNSHOT IN-JURIES—By Leo Mayer, M. D., Instructor in Orthopedic Surgery, New York Postgraduate Medical School and Hospital, with an introduction by Col. E. G. Brackett, M. C. N. A., Director of Military Orthopedic Surgery. 12mo. of 250 pages, with 184 illustrations. Philadelphia and London: W. B. Saunders Company, 1918. Cloth, \$2.50 net. The title of this book would seem to indicate that

the treatise has no value for the civil practitioner. While written distinctly as a war book, it yet has wide range of application in civil practice. It deals with traumatic surgery and God knows there is too much of this in industrial life today, and all this comes to the civil surgeon. Any one doing civil traumatic surgery will find in this little condensed book valuable information on guiding principles and mechanical technique. The government is aiming to restore to its mangled soldiers the largest possible per cent of function of the member disabled-arm, leg, hand, foot or whatever it may be. So it should be the aim of the civil surgeon to think of functional results for those who come under his care from the great army of industrial workers wounded in the great war of economic competition. The book deals with injuries of the extremities in a way that makes its lessons and suggestions available in injuries from any cause, and not in injuries from gunshot wounds only. It is distinctly a reconstruction book of a valuable character to every doctor. Its primary purpose is to point out the way to so handle injuries that when recovery has followed, the injured member will be ready to perform again its normal function if possible; if not possible, then as much of its normal function as possible. In every step of the treatment this is the controlling idea. Civil life produces as pitiable deformities as military life. This book is much more than the title indicates. Anatomical recovery and functional recovery should go hand in hand.

DANIEL MORTON, M. D., F. A. C. S.

The Management of an Infant's Diet

Constipation

In a very large percentage of cases of constipation in early life, this annoying condition is due largely to some fault in the diet, and usually the difficulty can be easily traced to an incomplete digestion of protein or of fat. By changing the food and advising a daily diet prepared according to

The Mellin's Food Method of Milk Modification

the condition is very often corrected immediately, for the reason that Mellin's Food helps materially in the digestion of cow's milk. In cases where the condition has persisted for some time, simple changes in the proportion of Mellin's Food, milk and water will soon bring about normal stools.

Practical suggestions relative to the readjustment of the diet are set forth clearly in the chapter on "Stools" in our book, "Formulas for Infant Feeding." We also have a pamphlet devoted particularly to the subject, and all of this literature will be sent to any physician upon request.

Mellin's Food Company,

Boston, Mass.

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WET WEATHER TALK

It ain't no use to grumble and complain;
It's jest as cheap and easy to rejoice—
When God sorts out the weather and sends rain.
Why, rain's my choice.

Men gingerly, to all intents—
Although they're apt to grumble some—
Puts most their trust in Prorvidence,
And takes things as they come—

That is, the commonality
Of men that's lived as long as me,
Has watched the world enough to learn
They're not the boss of this concern.

With some, of course, it's different—
I've saw young men that knowed it all,
And didn't like the way things went
On this terrestchul ball—

But all the same, the rain, some way, Rained jest as hard on picnic day; Er, when they railly wanted it, It mayby wouldn't rain a bit!

In this existunce, dry or wet,
Will overtake the best of men—
Some little skift o' clouds'll shet
The sun off now and then—

And maybe, whilse you're wunderin' who You've fool-like lent your umbrell' to, And want it—out'll pop the sun, And you'll be glad you hain't got none!

It aggervates the farmers, too—
They's too much wet, er too much sun,
Er work, er waitin' 'round to do
Before the plowin's done;

And maybe, like as not, the wheat, Jest as it's lookin' hard to beat, Will ketch the storm—and jest about The time the corn's a jintin' out.

These-here cy-clones a-foolin' 'round—
And back'ard crops!—and wind and rain!—
And yit the corn that's walered down
May elbow up again!—

They hain't no sense, as I can see, Fer mortuls sich as us, to be A-faultin' Natchur's wise intents, And lockin' horns with Providence!

It hain't no use to grumble and complain;
It's jest as cheap and easy to rejoice—
When God sorts out the weather and sends rain,
W'hy, rain's my choice.

-James Whitcomb Riley.

Love is a plant of double root
And strange, elastic power;
Men are divided in naming the fruit
But a kiss is only the flower.
—John Boyle O'Reilly.

Notes on Reliable Remedies

Dr. Robert T. Morris is president of the organization formed to establish in New York a Home for Physicians who become incapacitated.

Failure of the Endocrine Glands to functionate properly is known to be the cause of a good many disorders that give the practitioner a lot of worry. These cases must be studied carefully and the endocrine gland preparations prescribed rationally. These preparations may be used singly or in combination. Of course it is useles to give any product that the patient does not need. The thing to do is to decide what is lacking and specify the gland to supply the deficiency. The glands used by the Armour Laboratory are selected with great care and are desiccated in vacuum ovens at a low temperature to insure the therapeutic active principle of that gland's being uninjured.

Epilepsy—Bromides are unquestionably our most effective remedy in the treatment of epilepsy, but they are not always well tolerated. Peacock's Bromides, however, are combined in such a manner that while possessing maximum efficiency they are free from objectionable effects common to ordinary bromide preparations, even when administered over long periods and in large dosage. They do not impair the digestion, nor depress the heart and nervous system, and do not produce the skin eruptions that are so prone to develop following the use of bromides of doubtful quality.

New Uses for Old Product-It is an old saying that there is nothing new under the sun. There are many uses for old things, however, and new combinations. Benzyl benzoate, as a chemical compound, has been recently found to possess marked therapeutic qualities although used solely for a long time and to a large extent in the perfume industry. For medicinal purposes benzyl benzoate should be absolutely free from chlorine and phosphorus. Benzyl benzoate is considered a safe antispasmodic and is so reported by Macht of Johns Hopkins Medical school, and by Litzenberg. A number of others are also working with this product. Its most noted uses have been found to be dysmenorrhea, bronchial spasm or asthma, angiospasm, high blood pressure, hiccough, pertussis, biliary and renal colic, spastic constipation, diarrhea, pylorospasm and enterospasm. Benzyl benzoate has a penetrating odor and a burning, disagreeable taste. It may produce slight nausea, but there is no record of dangerous or toxic symptoms having developed from its use. Eli Lilly & Company supplies benzyl benzoate in elastic filled capsules containing five minims diluted with an equal part of cottonseel oil.

Two Reliable Preparations—Physicians who make it a rule to employ every possible means to contribute to the relief and comfort of their patients, rarely need an introduction to the two Micajah Products, the wafers and the suppositories. The wafers have been used for many years with uniformly satisfactory results. This was to be expected because Micajah's Wafers are the outcome of an old prescription originated by a busy doctor who had ample opportunity to determine what agents could be best employed in the treatment of those forms of inflammation of mucous membrane so common in women. Micajah's Wafers being antiseptic, astringent, antiphlogistic and yet soothing and healing are easy of application and

reliable in action and results. The formula of the suppositories is a good one and should commend itself to every physician. Samples of both wafers and suppositories, together with interesting literature, will be sent to any physician on request to Micajah & Co., Warren, Pa.

In malarial conditions a diuretic is not indicated as often as the symptoms suggest, as one always has to contend with a torpid liver, that is throwing a part of its work on the kidneys, meaning double duty for the latter. In such cases the rational treatment is to use some agent which will stimulate all the excretory organs, dividing the duty of each and causing thorough elimination. Tongaline, either alone or in combination with other agents, as indicated, will invariably expel the malarial and other poisons promptly and thoroughly.

Progress-The rapid growth of the American chemistry industry is indicated by the announcement that The Abbott Laboratories have recently purchased twenty-six acres of ground in North Chicago and will soon commence building an additional plant for the exclusive manufacture of synthetic and other chemicals. Physicians and pharmacists are enthusiastically encouraging the idea of American independence in pharmaceptical and chemical lines. The Abbott Laboratories is a leader in developing, under government license, such important products as Barbital (Diethylbarbituric Acid), Cinchophen and Procaine. They are also supplying Anesthesin, Dichloramine-T, Chloramine-T, Nucleinic Acid, Colchichine, Hydrastine, Sanguinarine Nitrate, Arbutin, Lecithin and other chemicals.



A CLINICAL LABORATORY

THAT RENDERS A REAL SERVICE

The BEEBE LABORATORIES, Inc.,

have opened a well equipped Clinical Laboratory in the Argyle Bldg., KANSAS CITY, MO.

Your inquiries will receive prompt, personal attention.

Specimens reported the day received.

BEEBE LABORATORIES, Inc.

ARGYLE BLDG., KANSAS CITY, MO.

Strengthening the Heart Action — It has been demonstrated conclusively by clinical experience that Cactina Pillets reinforce and support the heart. A pillet every two or three hours will soon produce a pronounced tonic effect on the cardiac muscle, with corresponding improvement in the regularity and strength of the heart's action. Cactina Pillets are non-cumulative and can be used as long as may be necessary in chronic cardiac disorders, without a single ill effect.

Extreme Nervous Irritability—In the treatment of those individuals suffering with extreme nervous irritability—marked by reduced efficiency in their daily duties, sleeplessness, etc.—an essential purpose is to sleep during the night and a more tranquil mental state during the day. This is well accomplished by the use of Pasadyne (Daniel), given several times a day in moderate dosage with an increased dose at bedtime. The advantage of Pasadyne (Daniel) over the agents commonly used for this purpose, lies in its potency and freedom from ill after-effects. For example, the physician need not be fearful of de-pression following its use, or the fastening on of a habit. Pasadyne (Daniel) is merely a pure, concentrated tincture of passiflora incarnata, and has during many years proved its high value as a sedative for the nervous system. A sample bottle may be had by addressing the laboratory of John B. Daniel, Inc., Atlanta, Georgia.

Discussing Rheumatism—Dr. C. A. Tyler, in charge of the Alden Sanitarium for Rheumatism, in a lengthy article in one of our exchanges, says: "Pain, especially of an indefinite character, has been the bugbear of physicians for years. It is common to make a diagnosis of rheumatism where a cause can not be shown micro or macroscopically. Scores of patients are sent to us with a diagnosis of rheumatism; many of

them, I should say about 70 per cent, do not respond to recognized treatment for that disease. These patients, do, however, quickly respond to nerve cell nutrition, administered in the form of phosphorus. The mixture of phosphorus, as formulated by Dr. Dowd, has given us remarkable results." (See the reference to this preparation on page 76).

Prepare the Babies for Hot Weather-During the month of June it is not a bad plan for the physician to take mental "stock" of the babies under his care, especially such as are bottle-fed, with the general idea of recommending such treatment as will tone up and vitalize those whose nutrition may be below par, so that they may enter the trying summer months in the best possible condition to ward off or withstand the depressing influences of extreme heat or the prostrating effects of the diarrheal disorders of the heaten term. Careful attention to feeding is, of course, a sine qua non and the details of the infant's nourishment should be carefully investigated and regulated. But this is not all. Many bottle-fed babies are below standard from a hematologic standpoint. The marasmic anemic baby deserves special attention in the way of building up and restoring a circulating fluid which is deficient in red cells and hemoglobin. In the entire Materia Medica there can be found no direct hematic quite as suitable for infants and young chil dren as Pepto-Mangan (Gude). In addition to its dis tinctly pleasant taste, this hemic tonic is entirely devoid of irritant properties and never disturbs the digestion of the most feeble infant. Being free from astringent action, it does not induce constipation.
A few weeks' treatment with appropriate doses of Pepto-Mangan very frequently establishes sufficient resisting power to enable the baby to pass through the hot summer without serious trouble, gastro-intestinal or otherwise.



R Creosote Formalin Iodin Comp. by Inhalation, for all respiratory infections

THE PERFECTION INHALER

By Natural, Easy Inhalation Gives Efficient Service

Hay Fever patients stay at home in comfort by the use of this method. "FLU" preventive and successful treatment for doctors, nurses and patients.

To Physicians on receipt of price. Inhaler and Compound by mail, \$1.00, or six for \$5.00. Cash with order.

The Perfection Inhaler Co.

SOUTH BEND, INDIANA.

ANNOUNCEMENTS

Dr. Callie S. Walker has removed her offices from the Lathrop building to 315 East Tenth street, Kansas City.

Hay Fever—Doctor, consult your own interests. Cure the hay fever. See adv. page 60, and send for a "Perfection."

Dr. D. M. Griswold, of Detroit, has been appointed professor of hygiene and preventive medicine in the State University of Iowa, succeeding Dr. E. G. Birge, deceased.

For Goitre—Doctor, you should try the special goitre tablets put up by the Columbus Pharmacal Co., Columbus, O. One trial will convince you. See announcement in this issue.

Dr. Charles H. Mayo of Rochester, Minn., who gave valuable medical service to the country in the war, has been awarded the distinguished service medal by direction of President Wilson.

Drs. John M. Walker and James C. Walker, assistant surgeons in the U. S. N. service the past two years, after honorable discharge, have returned to Kansas City to resume their practice at 315 East Tenth street.

New Catalog—The Frank S. Betz Company, Hammond, Ind., announce that they have in press a new catalog on electro-therapeutic apparatus, which they will be pleased to furnish to any doctor who will send his name and address.

Electro-Therapeutic Week in Kansas City—Specialists visiting Kansas City this week are cordially invited to call on the Merry Optical Company, Tenth and Walnut, and inspect their up to date line of instruments for those specializing in the eye, ear, nose and throat.

Intravenous Medication—If you wish to give your patients the benefit of the latest, up-to-date treatment for anemia, syphilis, and skin diseases, write for clinical data to the New York Intravenous Laboratories, 110 East 23rd street, New York City. See announcement on page 59, advertising department of this issue.

Grace Hospital, Kansas City, Mo., has engaged Dr. S. H. Richman to take charge of the work of a fully established clinical and diagnostic laboratory department, including Wassermann tests. Dr. Richman was formerly connected with the Cook County Hospital and was the pathologist at the Cook County Institution, Chicago. After two years service in France, he chose Kansas City as a location, with offices at 315 East 10th street.

Golden Opportunities

BARGAINS FOR YOU

Listen, Doctor—If your car is giving you trouble during this changeable weather, it is your carburetor, no doubt. Why not end all your troubles by installing a "Zenith?" The doctors are all doing it.

New Sex Book—A practical, common sense, plainspoken little book on the sexual functions, by Mary Ware Dennett. Price, 25c, postpaid. Address Book Department, Medical Herald, Kansas City, Mo.

Bathing Girls—Just out. Pretty, modest and fascinating pictures for the doctor's sanctum. Fifty cents each; five pictures, all different poses, for \$2.00. Address Art Department The Medical Herald, Kansas City, Mo.

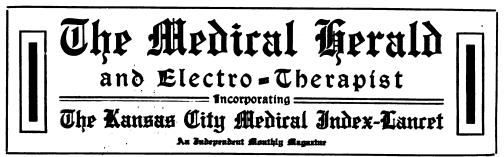
Bargains in Electrical Apparatus—Portable Vulcan coil, type A, will do all bone work Two good tubes. Make me an offer. Address Electric, care Medical Herald.

Want to Buy a Chair or Electrical Equipment?—Doctor, have you something to sell or exchange? Do you want a location or an assistant? Are you looking for new opportunities? Use and read this column. Ads two cents a word. Remittance should accompany order. Address Bargain Department Column, The Medical Herald.

Doctor, if you receive a copy of the Medical Herald and are not a subscriber, please take it as a cordial invitation to remit a dollar and receive our magazine for the year 1920. Turn to advertising page 68 and note the feast of "Good Things To Come" in the early issues of the Medical Herald.

"Poems the Doctor Should Know," 16 pages, 45 poems of war, love and patriotism, including the immortal poem, "In Flanders' Fields," by McCrae, and several answers to its challenge. Price, 10 cents a copy, three for 25 cents. The Medical Herald, Ridge Building, Kansas City, Mo.

It is announced that Dr. Noguchi and his associate, Dr. Kligler, both of the scientific staff of the Rockefeller Institute for Medical Research, have gone to Yucatan at the urgent request of the people and authorities of the stricken regions, to study yellow fever, which still ravages certain districts and is a menace to other tropical and semi-tropical countries—among them our own Southern States and the West Indies.



ol. XXXIX.

JUNE 15, 1920

No. 6



THE CLINICAL PICTURE OF PYELOCYS-TITIS IN INFANCY*

CLIFFORD G. GRULEE, M. D., Chicago.

My reason for choosing this subject is that o the average practitioner of medicine pyelocysiitis in infancy, if known at all, is regarded as a vague, indefinite disease, only rarely encountered In the average text-book on pediatrics the subect is not given anything like the important discussion that it deserves, and what there is fremently leads to erroneous conclusions. When me considers that pyelocystitis is among the three or four most frequent causes of fever in nfancy, and that if it were recognized there would be much less tendency to ascribe rises of temperature to uncertain origin or teething. These are among a few of the reasons why the lisease pyelocystitis deserves such careful attention on the part of the practitioner of medi-ine, but these are not all. The marked tendency of the disease to recur and the more than suspicion that the pyelitis of pregnancy may be a recurrence of this condition, makes it of inerest not only to the pediatrician but to the whole medical profession. You will probably hink that I am riding a hobby, or that I am grossly exaggerating the importance of this conlition, but you need only ask some one of your pediatric friends to be convinced that this is not he case. He will tell you that probably the nost frequent disease for which he is called in consultation is pyelocystitis, and that it is the me which is least often diagnosed.

We may from the clinical standpoint divide he cases of pyelocystitis into five groups: (1) a fulminant form; (2) acute; (3) subacute; (4) thronic; and (5) a type which may be termed intermittent. Let us take these up in order, first bearing in mind that the chief characteristic of them all is an almost absolute absence of symptoms pointing to the urinary tract, and that about eighty per cent of the cases occur in girl babies.

First the fulminant type. In these cases the child becomes rapidly ill, the temperature rising high, up to 105 degrees or 106 degrees F., frequently, the child rapidly becomes unconscious and in every way shows a very severe intoxication. There may be a slight diarrhea which is not severe enough to account for the general condition of the child, and vomiting is quite common. In most of these cases there is quite marked distension of the abdomen and because of this, with the gastrointestinal symptoms, most of the cases are diagnosed gastroenteritis. On physical examination one usually finds very little. There is oftentimes a slight enlargement of the liver and the lower poles of both kidneys may be palpated. The white blood count is usually high, sometimes going as high as thirty or forty thousand. The quantity of urine passed is scanty. There may be a small amount of albumin, but this is not a marked factor. In the first forty-eight hours it is not usual to find pus in the urine in these cases. However, careful exmination will reveal myriads of slightly motile bacteria and if the patient lives from forty-eight to seventy-two hours the urine is found to be loaded with pus. These cases run a stormy course, frequently terminating fatally in two to three days. Convulsions are quite common and the condition is altogether a very serious one. Happily, this form is quite rare, but one should always be on the lookout for the possibility of its occurrence.

The difference between the acute form and the fulminant is largely a difference in the prostration of the child. In spite of an extremely high temperature, frequently up to 105 degrees, 106 degrees or even 107 degrees F., the child is not toxic nor unconscious. It shows the effects of the fever to a certain extent but not to anything like the degree that one would expect

^{*}Read before the Medical Society of The Missouri Valley at Des Moines, Iowa, Sept. 18, 1919.

There is absence of the same degree of involvement of the sympathetic nervous system as is shown by the distension of the abdomen in the fulminant type. It is not often that the liver is perceptibly enlarged, nor are the kidneys usually palpable. The temperature curve is frequently suggestive. While in some cases the temperature is maintained rather high throughout, in many it is intermittent or remittent. A fall of temperature of five or six degrees within an hour or two is quite frequent, with just as rapid a rise following. So the temperature curve is one of high peaks and low valleys. Examination of the urine in these cases usually shows an abundance of pus, which rather rapidly decreases under treatment, clearing up with the clear up of the general clinical picture.

Gastrointestinal symptoms of mild degree are found in this form, as in the fulminant type, and a rather frequent clinical finding is the flushing and pallor in the skin as the result of vasomotor disturbance, frequently even a slight scaling, at times showing itching, suggestive of a slight eczema. In this form the absence of symptoms pointing to the urinary tract is much more striking than in the former type, because in this the cerebrum is not nearly so involved.

The subacute type is either a lowgrade infection or, I suspect frequently, is a recurrence. All the symptoms already mentioned in the acute type are there to a less degree. The fever is usually such as not to alarm one greatly, running perhaps 100 degrees to 101 degrees F. The case may have gone on for months with nothing more than this clinical picture, or there may have been at times a rise in temperature above this with a rapid fall. These cases usually respond rather rapidly to treatment, the pus quantity in the urine is not so great as in the other types and the difference, as stated, is rather one of degree than of kind.

In the chronic form, however, a rather different problem asserts itself. In this the child is brought to you not because of fever, but for vague condition such as loss of appetite, restlessness, sleeplessness, change of disposition, or perhaps only a malnutrition. Careful physical examination reveals nothing, and if the urine is not examined you are rather surprised that you do not find the same response to dietetic treatment as you ordinarily receive. However, it is remarkable how quickly the disturbance above mentioned clear up after the pyelocystitis is discovered and properly treated. These cases usually run a low temperature at some period in the day. This, when present, is most significant and especially in young infants is not as suggestive of tuberculosis as it is of some other form of infection.

The intermittent type is the most peculiar of all. It is usually discovered only in hospital

cases. A child will be in the wards for some nutritional or other disturbance, having had a perfectly normal temperature for days. Suddenly, without warning, the temperature rises to 102 degrees or 103 degrees F., only to drop within a few hours to the former level and remain there. If, during this febrile period, one examines the urine he not infrequently finds a large amount of pus, and this notwithstanding the fact that the urine may have been repeatedly examined without showing anything abnormal. The significance of these cases is rather hard to estimate but certainly we should take them into account in estimating any abnormalities in a given case, and should be careful to study the urine whenever a febrile period makes its appearance.

After this consideration in a general way of the types to be encountered, let us take up a few of the characteristics of pyelocystitis in infancy. As already stated, it is most common in girl babies and perhaps most frequent between the seventh and twelfth months. This last statement may be called into question by those with the greatest experience, but the marked tendency to recurrence leads one to suspect that many of the acute cases seen are really not primary, but are recurrences, so it is very likely that the condition is most frequent in the first year of life. One is struck in these cases by the lack of any irritation of, or symptoms which apparently point to, the urinary tract. It is the exception for these infants to manifest any discomfort at the time of urination, and even the older children do not complain of any symptoms pointing to the bladder or urethra.

One should always keep in mind the marked tendency to recurrence, even though the case may have been seen early and adequately treated. Whenever a child who has had a definite attack of pyelocystitis develops a fever it is more than ever necessary that the urine be examined immediately, no matter how slight this fever is nor how transient its course.

Just a word about the urine. In the first twenty-four hours there may be nothing more than a bacteriuria, but almost certainly within forty-eight hours pus in large quantities is to be found. The bacterial cause, as shown in the urine, is so uniformly the B. coli that unless something unusual happens I have ceased $^{\rm to}$ make cultures in my cases. The amount of $^{\rm pus}$ varies a great deal in the different cases. I have found it of great deal of value in estimating a given case to have a daily count of the number of pus cells in the urine. As you know, the number of pus cells in the infant's urine is negligible and only an occasional pus sell is to be found. In the urine of the child with pyelocystitis, when this is carefully removed after cleansing of the parts, the count will vary from several thousand

own to twenty-five to thirty per cubic millileter. A count of ten to fifteen held over weral days I usually regard as approximating ormal. Albumin in these cases is present only arely and then only in traces. Casts occasionlly occur in the acute stages, or, if the condition as lasted untreated for several months and there involvement of the kidney substance, we find n occasional red cell with some casts and oftenimes albumin.

The importance of this condition is scarcely obe exaggerated and I hope that this presentation has been sufficiently clear to stimulate our interest and call your attention to the great recessity for the examination of urine in babies and young children. Nor is this an admonition only to those men who practice the nonsurgical side of medicine. I have found very frequently that pyelocystitis develops following operations and would warn you surgeons that in these intends and young children when you have a sudden rise in temperature following an operation it is always wise to make a careful examination of the urine.

104 South Michigan Avenue.

THE TREATMENT OF UTERINE HEMOR-RHAGE BY RADIOTHERAPY*

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In the consideration of this subject it is well for us to review briefly the causes of uterine hemorrhage other than those of the puerperium.

In young unmarried women, we frequently meet cases of intractable hemorrhage where we are unable to demonstrate a pathological cause. We must concede that these cases are due to a disturbance in the menstruation cycle, probably an over active influence of the corpus luteum. Occasionally, one will see a young woman who has an ovarian cyst, the pedicle of which becomes twisted. There is often an excessive flow which follows this accident but because of the other symptoms produced at the same time, the patient usually comes quickly to surgical treatment. On the other hand, a large ovarian cyst which has destroyed all the ovarian tissue of both ovaries will produce cessation of the menses instead of menorrhagia. The destruction of ovarian tissue and function by large cysts may be so absolute, even in the young, that adiposity and absence of pubic and axillary hair supervene, the girl never developing into womanhood. (Case No. 11763.)

There is another type of disturbed menstruation in young women which causes most physicians considerable anxiety, that is the nervous, thin, young woman who has her period every two or three weeks, each period accompanied by so much pain that she is partially or wholly disabled. She usually has all kinds of medical treatment and from one to several currettements, but she suffers just as much as before having had treatment. These poor, unfortunate young women can get complete relief through the application of radiotherapy.

Women of the third decade or older frequently suffer from fibroid tumors which are usually accompanied by menorrhagia. It has been demonstrated by many surgeons that removal of the ovaries will be followed by a gradual reduction in the size of the fibroid tumor and even complete disappearance, provided the tumor is not more than fifteen centimeters in diameter. Even those more than fifteen centimeters in diameter will appreciably decrease in size and the patient will be symptomatically cured.

In mature women there are many cases of hyperplasia of the endometrium which causes excessive flow. These are usually the result of or consequence of childbearing and usually respond nicely to surgical currettement of the excessive tissue.

Cases of uterine hemorrhage from arteriosclerosis, are very rare and are found in those advanced in years.

A considerable percentage of women at the climacteric flow excessively, yet upon bimanual examination and even miscropical examination of the scrapings from a currettement, no pathology is demonstrable.

Of the uterine hemorrhage at the climacteric. one is always suspicious of carcinoma. Careful examination should always be made to determine the presence or absence of malignancy in these women. If carcinoma is found and is operable, surgical intervention should be recommended at once.

Sarcoma is occasionally (rarely) found as a sequence of uterine fibroid.

Modern authorities (9) have proven, we think beyond any doubt, that the great majority of uterine hemorrhage is due to a disturbance of the ovarian function. That part of the ovary influencing menstruation and causing excessive flow, is doubtless the corpus luteum. Granting this true, all uterine hemorrhages, except those of the puerperium and those due to actual ulceration of the uterine canal, are due to disturbance of the ovarian function.

Now let us turn for a moment to the histological action of roentgen rays and radium upon the tissues.

First. The tumor cells, especially the nuclei, show cloudy swelling with hypertrophy. The chromatin coagulates is diffused and may be displaced in the protoplasm. Later vacuoles occur and the nuclei disappear. The cell then loses its identity and the detritus is carried away by the leucocytes. New connective tissue gradually re-

^{*}Read before the Medical Society of The Missouri Valley at Des Moines, Iowa, Sept. 18, 1919.

places the tumor cell thus diminishing its malignant characteristics. (48.)

Second. Radiotherapy produces an edema of the endothelial lining of the small capillaries. this edema becomes so intense under sufficient dosage that the lumen of the vessel becomes occluded, thus resulting in an endarteritis obliterans. This shuts off the blood supply thus starving the growth. (49), (9).

Third. Radiotherapy inhibits ovarian function by its action on the ripe and ripening Graafian follicles. These are most easily affected, then in order comes the primordial follicles and the interstitial tissue. The effect of radiotherapy upon menstruation depends upon the amount of destruction of the follicles. If some are destroyed, it will be retarded, if all then it will cease entirely. (50), (51).

Fourth. Radiotherapy does not inhibit or interfere with the internal secretion. I have observed this in many cases and it is amply supported by many eminent gynecologists and radiotherapists. (52).

The type of cases suitable for radiotherapy should be selected carefully. If this is done, we can promise very definite results in all cases.

In uterine fibroids, except the pedunculated submucous type, cessation of the hemorrhage and reduction of the size of the tumor will follow in all cases. Those fibroids above fifteen centimeters in diameter will be very slow at disappearing, and many will not disappear entirely. Symptomatically, the patient will be relieved. Those fibroids below fifteen centimeters in diameter will disappear completely.

Hemorrhage at the climacteric, without demonstrable pathology, is an unusually attractive field for radiotherapy. In these cases, we can promise one hundred percent cures. There is no line of therapy which gives results so gratifying to the patient as this. There is no anesthetic, no discomfort, no risk and yet the results are certain. The patient passes quickly through the menopause in a few months time instead of having to drag through several years. Since the internal secretion of the ovary is not disturbed the patients suffer little or none from the nervous symptoms of the menopause such as, hot flashes, lack of nerve balance, etc.

Knowing the success gained upon intractable bleeding at the climacteric led me, a number of years ago, to use radiotherapy in the treatment of intractable bleeding in young women. The result in one case, a girl of fourteen, who was just entering menstrual life, was so rapid and so successful that a single treatment sufficed, the bleeding ceasing in three days. At no time since then, six years, has she had trouble with excesive flow at her periods. Such quick action is unusual but many cases of a similar type in young women have been treated since with uni-

formly good results. Most of these patients have had several currettements without results, together with medical treatment. Radiotherapy has been rapid in action and certain in results. Many young women so treated have since borne children.

There is another type of case where radiotherapy is of great value. I refer to young women of the visceroptotic type who suffer such extreme pain at their menstrual period that they are partially or wholly disabled. By proper techique and proper dosage, these young women can have menstruation stopped for a few months. In the meantime they regain their nervous equilibrium and build up generally so that when menstruation does return they suffer little. (One must not carry the dosage far enough to produce permanent sterilty. (Case No. 11047). These patients who have been incapacitated for work are able to return to their usual occupation.

Carcinoma of the uterus is always surgical. if operable, but surgery should always be followed by radiotherapy to block off the lymphatics and kill any cancer cells which may have escaped the knife.

All cases of inoperable uterine carcinoma can be greatly helped by radiotherapy. Bleeding and discharge can be stopped, pain relieved and the patient's life prolonged. Every such patient treated has been warm in her expression of gratitude at the relief gained. In many, the tumor mass is much reduced in size. In some, the condition has been so changed that surgical treatment was possible.

Sarcoma of the uterus is seldom seen but when found is rapidly fatal unless removed at once.

Case Histories

Case No. 11047—M. M., 23 years, single. In 1915, she began to flow. This lasted for three weeks, when it stopped by currettement. In 1918, she was again curretted and was well until the last week in January of 1919, when she flowed severely, it lasting until April 1919, when it stopped spontaneously. When she came in April 1919 for treatment she was still flowing slightly. Examination—No demonstrable pathology Diagnosis—Intractable hemorrhage. Results—Patient is well after four series of treatments.

Case No. 7011—Mrs. E. N., 45 years. For several years she has had a fibroid tumor of the uterus. She has had local treatment without results. At one time she was jaundiced. She has been flowing several months and is very anemic. Examination—Tumor the size of a lemon. Diagnosis—Uterine fibroid and cholecystitis. Results—After two series of deep therapy treatments, all bleeding stopped and has not recurred in fifteen months.

Case No. 9711—Mrs. A. C., 33 years, married. Since her first menstruation she has had much jain. One year and a half ago she began to flow excessively. Examination-Multiple small fiproids in the body of the uterus. Diagnosis-Uterine fibroids. Results—She has had three series of treatments and reports herself in splendid condition eight months after her last treatment.

Case No. 6622—Mrs. W. O. T., 38 years. married. Eleven years ago she had repair and fixation. Seven years ago she had an operation on the right kidney and uterine suspension. One baby has come since each operation. Both births were normal. October 21, 1916, she began to flow and has flowed constantly since. She has had no miscarriages. She has had two currettements with no relief. No fibroid is present. Examination—No demonstrable pathology. Diagnosis-Climacteric hemorrhage. Results-She has had only one series of deep therapy treatment. The hemorrhage ceased entirely and has not recurred. She has been well two years.

Case No. 9417-Mrs. W. M. C., 28, married. For six months she has had excessive menstruation. Two months previous to treatment she. flowed four weeks. She had two currettements and medical treatment with only slight improvement. Examination—No demonstrable pathology. Diagnosis—Climacteric hemorrhage. Results—After two series of treatments the bleeding ceased and the patient has not flowed since the last treatment one year ago. She has gained fifteen pounds and is in the best health she has been for years.

Case No. 8445—Mrs. A. F. S., 47, married. Up to March, 1918, patient was weak and nervous but regular. At this time she began to bleed. which has continued to date. In April, 1918, she was cauterized and the cervix curretted. Examination—Mass filling entire pelvis, ulcerating cervix. Diagnosis—Inoperable carcinoma of the uterus. Results—After four series of deep therapy treatments the patient is well, ten months after the last treatment.

Case No. 8496—Mrs. C. N. D., 64 years, married. In May, 1916, she had a hysterectomy for cancer of the uterus. In February, 1918, she had a small recurrence in the vaginal vault. was removed. She now has a slight discharge. Examination—Ulcerating area the size of a half dollar in the vaginal vault. Diagnosis-Inoperable carcinoma of the vaginal vault. Results-Five months after treatment by radio-therapy and electrothermic coagulatin, the vagina is thoroughly healed.

Case No. 11763-Miss L. M., 14 years. For about one year she has complained of pain in the right side of the abdomen. There was no fever. She had nausea but no vomit. She now has a lump the size of a cocoanut on the left side and one on the right side extending almost to the diphragm. X-ray examination showed a large tumor filling two-thirds of the abdomen. Results-She was operated July 28, 1919, and a large ovarian cyst was removed from the right ovary containing one and a half gallons. There was a small cyst of the left ovary the size of a cocoanut

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THE MODERN THERAPEUTIST*

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It is customary in classical medical writings to begin one's paper by going back into the history of the particular subject, and tracing its developments on down to modern times and then going ahead with the subject at hand.

If I were to attempt anything of the kind in this paper it would neecesitate the writings of volumes and volumes of history, and I do not know the history of medicine well enough to write it, and besides it has already been written so well that it would be folly on my part to even attempt to quote from what has been written.

^{*}Read before the Western Electro-Therapeutic Association, Kansas City, Mo., May 28, 1920.

You all have read more or less of the medicine of the past—made up you might say of everything known to the human mind, and many things beyond even our power of imagination.

One does not really need to go into ancient history to read of the wildest absurdities in the treatment of diseases. In China at the present time, medicine is the most absurd thing one can imagine. It is most interesting reading and well worth one's spare time to read of the practices of our worthy brothers in the healing art, among the Chinese, the American Indians, and many other peoples who have never seen the light of educated modern medicine. And the one startling fact outstanding always with those practitioners is their absolute faith in the methods they use. Although they see failure after failure, they go right on with their absolute faith unshaken.

Bring this right down to our old time doctor in the country communities far from the railroads today, and you will see the same faith unshaken. The old doctor looks at your tongue, and possibly feeels your pulse for 30 seconds, and right there and then he can pour you out a bottle of medicine that will cure you, and his conscience is perfectly clear. He knows he did exactly the right thing by you. You can find his description in the writings of medical history way back in the dark ages, or in modern unenlightened countries at this time. This is the type physician that you all remember when you were children. No wonder then that people looked at him as little less than a God. He knew so much, he could almost read one's thoughts. It was so sweet to send for the old doctor, he did not need to go to all the trouble we of modern times have to go to. He looked at the patient. poured out the medicine, gave a few general directions, sympathized with the people, and went away leaving them content with the thought that they had the best, and content to live or die as the Lord willed.

Those were good old days. Coming down to. when we started to practice medicine, say twenty years ago. We were told to examine the urine for albumen and sugar. We were supposed to listen to the heart and lungs, and use a little palpitation and percussion. We knew nothing about blood examinations, finer urine examinations-we could not measure the nitrogen content of the blood, we did not know anything about spinal fluid examinations, and a thousand other things we are bothered with now. We removed tonsils when they gave a lot of trouble, we pulled teeth when they ached or were sore. We didn't know these as prime factors for infection and the systemic toxemia. Our office at that time usually consisted of a small dirty room back of a drug store, with an old desk, some kind of a table and maybe a basin. The

desk was probably well covered with unopened medical journals and proprietary medicine pamphlets and old bills and letters. The examining table could be anything from a kitchen table up. A tin basin was very good. All these filthy and dirty. Urinalysis if ever done could be done at the prescription counter. Most of our office practice was done out in front in the drug store.

It may seem surperfluous to you to recount all this old stuff but we have gotten so far away from this now that a little review is not wasted when it is leading up to our present subject. The modern therapeutist, the man of the hour, the scientist, the clean shaven, clear minded medical man of today. You no longer find him in a dirty room at the back of a drug store. He no longer runs a drug store himself or is the feeder for sme other man's store. You now find him in the best office building in town. He has a suite of rooms consisting of three or more. There is of necessity a cheerful clean waiting room, for this doctor is busy and you may have to wait to see him. It takes time for him to carefully examine a case to tell just what is needed, and to give the proper treatment, and there may be some ahead of you. When your turn comes, the maid ushers you into a dressing room where most of the clothing is removed and a clean kimono or drssing gown is donned. If you have been to a modern physician's office before you may have brought your gown with you. Your history is carefully taken and recorded by an assistant, urine is taken for examination, possibly blood and sputum also, and possibly the stool. Then you go in to see the modern physician. He has a clean light room. and he is a clean well groomed man with a white coat. You are placed on an examining table and gone over carefully from head to foot. This man when he puts his hands on you can feel things. He has developed the sense of touch. When he listens to your heart or lungs he can hear things and knows what each sound means. He has developed his ears and his mind works with them. He never forgets to use his eyes. for they see much about each person, and with the history fresh in his mind, why should he not make a diagnosis. Then it is possible the urinalysis points to kidney or bladder stone and x-ray plates are made of these areas.

Possibly the fluoroscope shows widening of the aorta and a Wassermann test is in order. Maybe there is a suspicion in the lungs that requires sterescopic plates, and in children a Van Perquet test, maybe we need look for trouble in the pituitary, the thymus, or the teeth.

Our modern therapeutist has now spent a considerable time finding out what needs to be done for this patient. But it's all necessary. He has wasted no time either, for he has his labora-

ory equipped with everything needed and each hing in its place. The microscope is in its place, for he uses it continually, his test tubes and chemicals are all in place so he can put his nand promptly on each one. The x-ray machine and fluoroscope are in perfect condition for he cannot do without them.

Now he has made the diagnosis. He knows what ails the patient. This has not been accomplished by machinery, or hocus pocus, of any kind. It has come about by the action of a clear and educated mind. You will never get away from the human mind in diagnosis, no machine will ever tell what ails a man.

Now the diagnosis is made, what are we to do for the man? Will we write him a prescription for some proprietary conglomeration? Heartily we answer no. If he has a definite indication for a definite drug he gets that and that only. No more shotgun prescriptions come from the modern man. You no longer carry away bottles and bottles of medicine. That is not modern practice. If the patient has focal infection from teeth, tonsils, or simuses, these things are taken care of. Has he heart lesion he gets rest in bed, with the single drug indicated, and autocondensation if the blood pressure indicates it.

If he has tuberculosis he gets proper hygiene and maybe x-ray a la Dr. Gibson.

Has he kidney stone, he has the stone removed, followed by the proper diet and hydrotherapy for the correction of the stone forming habit. Likewise bladder stone. If he has an enlarged prostate which is causing his bladder trouble he has that prostate reduced by x-ray and other aids. If it is malignant possibly a superpubic cystatomy will be done and radium needles placed in the mass. Maybe they will be put in place through incision in the perineum.

If he has gastric ulcer, he will be put to bed, on proper diet and alkalies, and will probably get along alright. If the x-ray examination showed the ulcer at the pylorus, either in duodenum or stomach, but causing pyloric obstruction, he probably gets a gastro-enterostomy at once.

If the man has a malignancy he may have it removed surgically with the implantation of radium at time of operation, followed by thorough x-ray treatment.

If it is only rheumatism he has, every focus of infection is removed, and the pain and soreness relieved at once by the high frequency current.

Warts, moles and carcinomatous Keratoses are easily removed by one treatment with high frequency current or a few short treatments with radium.

Many of the skin lesions respond at once to the ultra-violet ray. What gives more satisfaction than the removal of portwine marks on women and children by the Kromeyer lamp, or certain things by the carbon dioxide snow.

Does the modern therapeutist use drugs? Most certainly, yes. But none of the old time prescribing. As he uses a knife to cut to a part, he uses a few drugs that actually do something, but they must have the power to go straight and do certain definite things. We need drugs—we always will need them, but they are only one of the small factors in the modern physician's life. His is no longer a mysterious profession. He scientifically studies a case to find the fault present, then directly applies the remedy, definitely to the certain indication.

The day of empiricism is gone. The modern man works clean to the trouble and applies the remedy directly. Long live the modern therapeutist, and may his tribe increase.

805 McGee St.

WAR LESSONS IN THE CONTROL OF GONORRHEA AND SYPHILIS AND THEIR APPLICATION TO PEACE

WALTER J. HANSEN, M. D., St. Joseph, Mo.

Formerly Surgeon 53rd Balloon Co., U. S. Army Air Service. Deputy State Commissioner of Health Buchanan County, Missouri.

Enlightenment is the only adequate panacea for the evil effects of ignorance. The attainment of an appreciable state of immunity through education obviously depends upon the degree of unenlightenment which is to be corrected and the efficacy of the corrective measure employed. The writer believes that it can be safely assumed that very few men or women, if fully cognizant of the horrors of syphilis and gonorrhea in the advanced stages, would deliberately incur the risk of contracting either of these diseases. Our fundamental conclusion then must be that a proper knowledge regarding the extraordinary malignancy of the venereal diseases would serve automatically as the most powerful prevention in the actual cure of victims who have already contracted the disease and intelligent measure to preclude the spread of infection from these per-

This nation, but recently emerged from active participation in the world's most colossal military struggle, has profited much from lessons taught and experiences gained even in the comparatively brief period of time involved. War is an inexorable but in many respects an excellent taskmaster. In wartime the grim law of imperative necessity becomes paramount above all other considerations. That which a nation may do collectively, or as separate individuals, in time of peace, is no precedent for the same nation's plan of action, or for the liberties of thought and deed of its individual citizens, in war. For the nation's actual tenure of life may depend upon the

prompt acceptance by its integral units of the principle that all private rights and interests are subservient to the supreme demands of the state when the latter is opposed to an active and powerful enemy. The citizen must not only profess but perform absolute obedience and the fullest possible measure of sacrifice, for the greater good of all rather than the lesser comfort of the few.

The war taught us, as real Americans, that we were not quite flawless in a great many respects. But the war also demonstrated in many instances, along with our faults a sovereign remedy for them, or at least an approximate degree of prophylaxis. A year and a half of war enabled us to arrive at basic essentials more readily than we would have done perhaps during a decade of peace.

Since the beginning of civilization the subject of venereal diseases has been avoided as a topic of extended discussion in the home, the schools, the churches, the public forums, the halls of legislative bodies. A mistaken idea has prevailed that syphilis and gonorrhea were evils incident to certain vicious but inevitable undercurrents of society, the least said about which the better. Respectable people were not expected to come into literal contact with such unmentionable distempers and anything savoring of thoughtful discussion must needs be classed as unpleasant agitation which could and would accomplish nothing to improve the existing situation. The ancient adage of "the more one stirs dung the worse it stinks," was accepted as a sacred verity.

This is a fallacy. Intelligent discussion of an evil, promotes united corrective thinking. Publicity is a powerful weapon when wielded against a skulking and depraved enemy hidden in darkened nooks. These noxious maladies, loathsome and foul as the bestial filth which breeds them, are propagated and nutured in darkness. Light

is fatal to their existence.

Only within the last year and a half have we come to understand the insidious menace due to the increase of victims of syphilis and gonorrhea, and it is not less definitely realized that the subject cannot longer be avoided in spheres of thoughtful consideration if practical control and gradual eradication of the evil is to be accomplished.

During the war we could not continue to deal with generalities or idle evasions. A people engaged in fighting for lofty ideal must at the same time face intrinsic facts. The United States Public Health Service Bureau, in its Venereal Disease Pamphlet No. 30, presented certain grimly significant facts concerning pox and clap, compiled from actual cases discovered among the second million men received at the mobilization camps. As stated in the pamphlet, virtually all of these cases were contracted within civilian communities and no record was kept of those who had the disease previously and recovered

It is at least reassuring to know that the working plan, developed and carried out with rigid zeal by attaches of the surgeon general's department, proved splendidly effective with regard to the men in military and naval service. This program, subdivided into four general classifications, consisted of: A. Social measures to diminish sexual temptation; B. Education of soldiers and sailors in regard to venereal diseases; C. Prophylactic measures against venereal diseases; D. Medical care.

The activities of the government military authorities brought to notice a great many salient Among these should be mentioned the startling ignorance of the average young man as to the physical and mental disabilities which may be caused directly or indirectly by venereal diseases. A vast number of the men believed they could effect a cure themselves, privately, by the use of certain patent nostrums and so-called cures sold by drug stores. The victims likewise placed faith in the quick cures promised by quack specialists whose treatment is frequently of incalculable harm to the patient. Many believed themselves to have been cured when they were not.

This kind of ignorance is responsible for wrong which cannot be estimated; innocent wives are subject to the danger of infection, with the remote possibility of children born cursed with the monstrous heritage of syphilis blood, than which no greater misfortune can be conceived: then, in lesser degree there is the certainty of spreading the disease still further broadcast among the denizens of questionable society. There were those who wholly ignorant of the danger of infection from contact other than the usual procedure, that of intercourse between the Thousands of young men were found who had no suspicion that insanity, paralysis. and kindred maladies may be the later results of syphilis when improperly treated. These terrible after effects, occurring possibly many years after all apparent symptoms of the original disease have disappeared, were not within the knowledge of these young men.

Others considered gonorrhea merely a local disease affecting the generative organs and which was negligible in its consequences. The vainglorious youth who declares that he would 'rather have a dose of clap than a bad cold" is still at large in the land and more than likely furnishes a familiar habitat for his nasty little friend gonococcus.

A small percentage of cases were found where the patient considered syphilis incurable. In some instances, the victims of this disease become addicts of narcotic drugs because of worry

over their having contracted the dread disease. Among the very ignorant there were found well-authenticated instances—largely among negroes where the infected person held to a superstitious belief that coitus with a virgin female would cause the disease to disappear at once from its original victim. The crime of rape, committed by negro men upon white women might be traced directly to this absurd belief, in many instances. Proper education upon the true nature and status of venereal disease would go far towards counteracting such dangerous false beliefs.

A number of those treated believed that the application of whisky or other disinfecting agents immediately following coitus would prevent infection. Very few understood the grave danger of sexual excitement or its consummation during the period of convalesence from the disease.

The campaign of education among the men in mobilization camps and cantonments carried on by means of printed literature and instructive lectures given by competent persons, was productive of excellent results. The reporting and recording of infected men, followed by scientific treatment of the patient and positive cure, likewise were of far-reaching importance.

Application of the same plan of procedure which has proved efficacious in military camps to the more complex ramifications of civil life would, the writer affirms, be wholly feasible. Education should be carried on constantly by printed literature, lectures, motion-pictures, and suitable propaganda disseminated through the press. Hearty cooperation, however, on the part of various branches of national, state, and municipal authorities, as well as social welfare, humane, and civic organizations, the medical fraternity, and the public generally, naturally would be vitally essential.

It should be made obligatory upon attending physicians to report all cases of venereal infection to the proper authorities, the physician to be held responsible for the name, deportment, and final disposition of the patient in the case of a person financially able to pay for treatment. For the care of those unable to pay, free clinics should be held, the patients at all times to be reassured that they are not being subjected to needless publicity except as is necessary properly to safeguard their health and the health of the general public.

In military and naval practice it was well established that judicious questioning usually elicited the name of the place and often the identity of the woman who infected the patient. While anything in the nature of an inquisitorial ordeal would be perhaps too drastic for unmodified introduction into civil life, this feature could be handled diplomatically.

The writer does not advocate the iron heel method of stamping out venereal diseases, but rather the gloved hand instead. But a gloved hand in which there is just the faintest suggestion of the steel grip of constituted authority within.

The right sort of inquiry then should result in isolating and determining the infection spreaders. These could be treated, if necessary, in special hospitals established for that purpose. Thus the clandestine prostitute, that most elusive of civilian menaces would be reached. A case is recalled by the writer of one of these women, a quisi-respectable, married woman, living in a furnished flat, who was taken out on a night excursion by six young men, each and every one of whom their fair companion infected with gonorrhea as a momento of the occasion. The sly harlot is a dangerous baggage.

The necessity of national, state and municipal laws of absolute uniformity and of harmonious and indefatigable action on the part of all workers is of course obvious. Education of young persons of both sexes upon the prevalence and danger of infection is very essential. Parents should be dispossessed of the idea that their own boy or girl, carefully kept in ignorance of such things, is immune from the misery and disgrace of syphilis or gonorrhea. Every patient is somebody's son or daughter. Intelligent and properly presented instruction upon the venereal diseases should be given the advanced classes in the public schools.

That more rigid and vigorously enforced laws are needed for regulation of dancing places, public parks, certain kinds of theaters, joy-riding automobile parties, suggestive or obscene reading matters and pictures, of course goes without saying. Communications which corrupt should be sought out and, if not completely removed, then rendered as inocuous as is possible in the face of human frailty and human susceptibility to the strange lure of morbid sexual desire.

Official communication to the public emanating from the Missouri Health Officers' Association, a legally appointed body.

From Kansas City to Rochester, Minn., in Four Hours—Dr. John H. Outland, aviator and surgeon of Kansas City, made a record trip recently from Kansas City to the home of the Mayo Sanitarium in Rochester. The doctor was accompanied by his son, John Outland, Jr., and piloted by Tex Lagrone, from the Kellerstrauss Field. From the above, one might assume that the doctor had in charge a patient in need of immediate operation, but such was not the case. He was merely taking the trip for pleasure, intending to join his friend, Dr. J. C. Masson, of the Mayo Clinic, at a nearby lake, where they expect to fish for several days.

Continuing "The Medical Fortnightly and Laboratory News."

The Herald Medical

and Electro-Therapist

Incorporating the

Ransas City Medical Index-Lancet

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Kansas Women and the Sterilization Law.

The rights of Kansas women to do more than take domestic dictation and cook and scrub and dig that the powerful influence of the home may be up to par as an eugenic nidus in which to cradle, grow and mature the healthful germ plasm that must stamp the character units of personality, of individuality, of their love produced offspring, bids fair to bear fruit. Not merely by ingraft conception but by the legislative "modus operandi" that will exclude by state law infra-ingraft conception that the further burdening of social standards, of moral laws, of public charities, of corrective and penal institutions may be curtailed by the cessation of future miscellaneous breeding of delinquency and mental deficiency (1).

That a dimunitive stimulation may be added to the worthy work of these thinking women of Kansas this question is submitted:

"Do You Know—That the administration of criminal law, man made law, to avenge an overt act going to a conclusion blindly, without understanding, is made clear by the fact that near 60

per cent of the population of penal and corrective institutions are, psychologically, personality mislinks and misfits, victims of the various types of psychic, subconscious and unconscious epilepsies. the automatic breeders of mental defects, mental deteriorations and true mental disease?

In the place of a man made law to avenge a mental deficiency act the intent is to prevent the marriage of the unfit and to legally enforce sterilization of epileptics that there be no chance of reproduction. In other words apply an aetiologic application of the law, first that defectives be not born to commit crime instead of a retroactive law as a coercive corrective and an impossible therapeutic measure.

This is in accord with the progressive medical minds of today in the application of the laws of eugenics, namely, that we may be well born. for the psychic and somatic betterment of the race.

The essential epileptic, whether of the petit mal, the grand mal, or any of the variations of the psychic type, is always a social danger (2). His reproduction is a social crime for which we are directly responsible through our own eugenic delinquency. A glaring example was the shock to the legal and social world recently in the multiple murders enacted by the notorious James Watson. Watson's so-called confession reveals that he had actual convulsions followed by unconsciousness while he was apprenticed to a cruel blacksmith during boyhood. And if the published report of his confession is half true, it teems with memory exhibits and horror acts that only belong to varying phases of psychic epilepsy (3), a mentally deficient criminal. a victim of the retroactive man made law of vengance and a non-corrective. His sterilization in boyhood would have saved the lives of nine women. A part of the routine medical treatment of the essential epileptic who otherwise seems well in private life, is the physician's insistant advice (4) that the simple operation of sterilization be done before marriage is per-

The seriousness of the breeding of epileptics is appreciated by the women of Kansas as indicated in the report of the legislative committee of the Federation of Women's Clubs, at the annual meeting in May at Hays, Kansas. This report urges that the existing state law for the "sterilization of epileptics" be enforced. There being no penalty for official dereliction in the law enforcement, an amendment is asked whereby the responsible officials may be penalized in default of duty.

⁽¹⁾ S. Grover Burnett: Do You Know "Mental Deficiency and Delinquency," Medical Herald, p. 106, April,

⁽²⁾ S. Grover Burnett: "Seven Years Study of Three Men Who Murdered Eleven People," The Medical Fortnightly, Dec. 25, 1907.
(3) Would Dr. Kern of California Study This Man Long Enough to Make a Scientific Report of his Case.
(4) S. Grover Burnett: "Treatment of Epilepsy—A 25 Year Report," Medical Herald, April, 1916.

Kansas is maintaining an expensive institution at Parsons for the exclusive care of epileptics while epileptic reproduction goes on throughout the state to keep it filled and to give zest to the criminal courts activity and to burden the taxpayer who pays the bills. Therefore, in addition to an amendment to penalize non-enforcement of the law, an additional amendment to sterilize an epileptic before a marriage certificate is issued should be made compulsory. Stop the breed that every joy in life may not be a nauseous nightmare. The rearing of beautiful, normal children is a solemn but the most sacred and joy-giving obligation to the parental heart; but epileptics, mental deficients, mental delinquents, criminal monsters and insane are hovered by a whole life's cloud without a silver lining.

If the live membership of the Federation of Women's Clubs of Kansas will sterilize the Kansas sterilization law with amendments to make it steril a progressive star will be added the Kansans crown of glory that will shine around the world.

S. G. B.

Vaccines and Infections

Vaccines are apparently a very popular method of treating the infections. It is evident that not infrequently the principles of vaccine treatment are hazy in the mind of the physician. Often vaccines are used as a last resort.

In an infection a microorganism stands in an infectious relation to the diseased process when it has been able to multiply and produce symptoms of disease.

In doing this, it must enter the body, and overcome obstacles, some mechanical, others functional, of the cells and fluids of the host. There is organ affinity and "serum-fastness."

An editorial in "The Journal of Laboratory and Clinical Medicine" says that vaccination has for its aims: (1) The initial increase of resistance of the host so that invasion by bacteria is made more difficult or, in the extreme case (smallpox) impossible; (2) to so modify the fluids of the body that once an organism has invaded the body it is not able to survive the condition which discourages parasitism (typhoid); (3) To so modify the fluids that in the case of developed parasitism, the bacteria are eventually killed (furunculosis). It is this latter instance in which we are especially interested at this time.

In an established infection we have either a localized infection or a general infection. If local the conditions are such that the growth of the parasites is inhibited to a certain extent because of a locally acquired protective mechanism. As in furunculosis. In such a case vaccination is to

immunize prophylactically against succeeding new infections while at the same time assisting in the cure of the old.

In general infections, especially in streptococcic and staphylococcic sepsis, the use of vaccines has not been brilliant and is apt to have harmful effects rather than beneficial ones.

Theobald Smith, commenting upon the general problems of vaccination, says "all parasites tend to incease the resistance of the host in which they live and multiply. Out of this universal fact a number of practical problems arise. In any given disease is it worth while to try to raise this immunity and how much energy will it cost the patient. If worth while, what is the best and most sparing way of raising such immunity artificially? In any localized infection you must ask: Is this a beginning process without attendant immunity, or is it a residual process associated with general immunity? If the latter, then vaccines may be considered safe. In processes associated with fever and bacteremia science says 'Hands off' until we know whether we have a progressive disease with gradual undermining of the resistance, or a more localized affection in which the excursions into the blood are secondary. Judged from this point of view as well as from the work of the laboratory, we would say that vaccines applied during disease will be rarely, if ever, life saving, but that they may hurry a stationary or languid process which tends toward recovery by bringing into play the unused reserves of the various tissues.

Infectious processes in general are suitable for treatment by active immunization, if they are localized, i. e., confined to one or more isolated lesions and are not associated with bacteremia. And if they are more or less chronic.

Autogenous vaccines are preferable, but there are certain cases in which the stock vaccines are productive of good effects.

The use of mixed vaccines is questionable and unscientific.

Dr. Frank Billings of Chicago, discussing a paper on "The End Results of Focal Infections" during April of this year, said: "The removal of the focus in chronic infective arthritis would not greatly benefit the patient or would not benefit the majority of them. The duty here was to build up the resistance against the invaders by methods employed for the restoration of the bloodvessels and for this purpose the methods of physiotherapy were suitable. The use of antigens in the form of dead bacteria had not proved satisfactory. He had used them controlling the work with all the knowledge at our disposal; he had used autogenous and non-autogenous, activated and non-activated antigens and those who did not receive them did as well as those who did. Foreign protein antigen injected intravenously appeared in the hands of some to have given success, but immunologists could not tell anything about this procedure. When one employed foreign protein antigens he was taking the health and possibly the life of his patient in his hands. He would not say that they should not be used but they should be approached with rare judgment and discretion."

P. I. L.

The Western Electro-Therapeutic Association.

The first annual meeting of this association in Kansas City was a decided success and highly gratifying to the officers and promoters of the organization. Twenty excellent papers were read and discussed with the result that electro-therapy received a salutary impetus in this section of the country. The interest and enthusiasm manifested at this meeting is indicative of the spirit which imbues the men engaged in this line of work. Electro-therapy has taken a permanent place in the practice of medicine and surgery, and according to Dr. Wm. L. Clark, "the class of men who are finding electro-physical measures of value, is growing increasingly better each year.' special guests of the society gave addresses that were highly edifying to the members. were Doctors J. D. Gibson of Denver, H. H. Bowing of the Mayo Clinic, D. T. Quigley and W. E. Wolcott of Omaha.

The association expressed its appreciation of, and confidence in Dr. Grover, by re-electing him president of the association, it being the concensus of opinion that the organization needed a master hand at the helm for another year.

In concluding his magnificent address, Dr. Grover senses the future of this association in the following words:

"This association is an expression of our desire for better application of methods by which practical effects may be given the principles for which we stand. It is our intention by every means in our power to insure its practical efficiency. It is our firm belief that through its instrumentality we can hope to become better physicians. The work of this association has now assumed definite character and will have that particular force which should be associated with our work.

"It is an established principle in social economy that knowledge in the individual and its rapid spread to the multitude are alike beneficial to individual and state. Therefore it becomes a moral obligation to be intelligent. If we are to come up to the standard of what is expected of us, we must be on the alert to grasp every opportuity which presents itself for our advancement.

"It is the desire of the organizers of this society that it shall be one of high standing and

scientific value and to that end it must have no substandard requirements."

The complete minutes of the society will be found in another part of this issue.

The Western School of Electro-Therapy

Held a three days' session previous to the meeting of the association, there being nearly one hundred in attendance from every section of the United States. The interest in Dr. Grover's lectures seems to increase each year, and it is expected that the attendance will be even larger next • year. Arrangements are being made for another session of the school, which will be more helpful to advanced students and those who have profited by the previous lectures given by Dr. Grover. The plan as outlined provides for one or two days' lectures and two days devoted to clinics and demonstrations. The recent developments in electro-therapy have been fully demonstrated by the widespread interest manifested in these lectures.

Increase in Subscription Price

A year ago we made the announcement that the subscription price of the Medical Herald would remain \$1.00 if possible to maintain this rate. In spite of all our endeavors, however, to keep down expenses, the price of white paper is still soaring and another increase in postage is due July 1st, while the wages of the printer still continue to advance.

With the additional papers read at the meeting of the Western Electro-Therapeutic Association, we find it absolutely necessary to increase the size of the journal. This cannot be done without increasing the subscription price, however reluctant we are to do so. The price of the Medical Herald and Electro-Therapist will therefore be \$2.00 per year, beginning with January 1st. 1921. Subscriptions will be received at the old rate, \$1.00, up to December 31st, and one may subscribe for as many years as they wish, at this rate. We believe, however, that our readers will find in an increased number of pages, filled with interesting material, ample justification for the \$2.00 rate. The papers read at the Missouri Valley and Electro-Therapeutic Associations are of the highest character and they will appear exclusively in the Medical Herald during the year. Renew now at one dollar, or pay two dollars at the end of the year.

M. S. M. V. Official Call for Papers

The next annual meeting of the Medical Society of the Missouri Valley will be held in

Omaha, Neb., Monday and Tuesday, September 6-7, under the presidency of Dr. Charles Ryan of Des Moines. The date of this meeting has been set forward beyond the usual time, at the request of Dr. John P. Lord, chairman of the arrangement committee, in order that our members may be given the opportunity to witness a novel entertainment in the ceremonial of the "Ak-Sar-Ben." The dates have also been selected with a view to avoiding congestion during the fall festivities. Headquarters and meeting place as usual at Hotel Fontenelle. Rooms should be engaged early to avoid disappointment. This notice is also an official call for papers, titles of which should be sent to the secretary. They will be placed upon the program in the order received. On account of the excessive cost of paper and printing, the usual announcements of the meeting will be omitted this year. Members will therefore look for all information in the official journal. Charles Wood Fassett, Secretary, 536 Ridge Building, Kansas City, Mo.

New Dispensary and Clinic for Kansas City

On June 13th, the "Alfred Benjamin Dispensary" was dedicated with appropriate ceremonies, at Admiral Boulevard and Harrison Street. The establishment of this new dispensary is the culmination of a struggle for betterment of the inadequate and cramped conditions experienced in carrying on the work in the old building. The new dispensary, with its modern medical and surgical equipment was made possible by voluntary subscriptions. It will be conducted along non-sectarian lines, although it will be operated under the direction of the United Jewish Charities, Mr. Alfred Benjamin, president. The staff of the dispensary and clinics will be under the direction of Dr. I. J. Wolf, as chief, and the following named physicians, surgeons and specialists: George Bellows, B. Belove, Sidney Blum, Frank Cohen, Clyde Donaldson, Julius Frischer, Joseph Getelson, E. L. Ginsberg, A. Goldman, Max Goldman, George Halley, Wolf Ibler, Ben Jacobs, H. D. Jerowitz, George Knappenberger, J. Lichtenberg, B. A. Lieberman, S. Loebenstein, A. J. Lorie, Paul Lux, A. B. Miller, Phillip Motz, Stanley Newhouse, George Pendleton, George Ringel, G. W. Robinson, Leon Rosenwald, Lyle Sellers, B. L. Sulzbacher.

Medical Veterans Organize—The medical and dental officers of St. Joseph who served in the World War held a meeting May 17, at which they organized with the name "Medical and Dental Veterans of the World War," and elected Dr. W. L. Kenney president.



The night has a thousand eyes,
And the day but one;
Yet the light of the whole world dies
With the dying sun.

The mind has a thousand eyes,
And the heart but one;
Yet the light of a whole life dies
When Love is done.
—Francis William Bourdillon.

"What is this spiritualism all about?"

"Remains to be seen."—The Yale Record.

There is a certain morale you can get only through contact with others—join the medical society.

Our old ideas have been obliterated, but sentiment may return us loyally to our ideals—let us fraternize.

The young doctor is in danger to become a mere technician at present, in the operating room and in the laboratory.

Mr. Peck—"Would you mind compelling me to move on, officer? I've been waiting on this corner three hours for my wife."—Puck.

The cry of the hour is "how shall doctors be obtained for rural districts." The hope is in the country boy, he has been accustomed to hard knocks from his birth.

Because taxi drivers are charging physicians more for taking the doctor to a patient than the doctor gets for his services, physicians of Davenport will probably increase their fees.

Clinical medicine has represented the human side of things, and can never be machine output.

But it is money, money, money everywhere. Keep your eyes open and you shall see.

Loyalty to one's fellows in the profession has made our fraternity what it is—respected and honored by the people. At least we had a good moral character once—when we graduated.

The mere fact that man is surrounded, covered and penetrated by an infinite number of bacteria, and yet lives, is a proof that the human body has within itself adequate defense against bacteria.—Crile.

The doctor encounters free service galore, free clinics, free hospital service, free laboratory service, free United States Public Health Service, free Red Cross clinics, free state and municipal service. Whither are we going?

In indigestion, where gaseous eructations follow soon after eating, and the digestion is very slow, hydrochloric acid is specifically indicated.



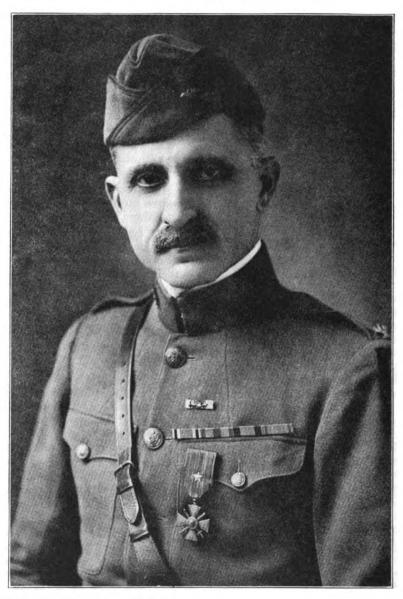
Dr. Harry Forgrave has just completed an elaborate residence at 19th and Clay streets.

Dr. H. Delameter, health physician of St. Joseph, has resigned his place to accept a similar post at Portsmouth, Va. Dr. Geo. M. Boteler has been elected to fill the place of Dr. Delameter.

Dr. Paul Forgrave has been elected member of City Board of Health in place L. J. Dandurant, who has resigned.

Dr. M. J. Farber, married early in May, has reurned to St. Joseph with his bride. Mrs. Farber is welcomed by the profession.

Dr. W. T. Elam brought a bride with him when he returned from the A. M. A. meeting at New Orleans. Mrs. Elam, a former nurse, had seen service abroad. Her home was in St. Louis, Mo., where the wedding took place. We welcome Mrs. Elam to the St. Joseph fraternity of doctors and nurses.



Courtesy Journal of the Iowa State Med. Society. .

DONALD MACRAE, JR., M. D.
President-elect Iowa State Medical Association.
(Colonel, Medical Corps, United States Army Mobile Hospital No. 1)



Dr. Edward Herman M. Sell, last of the seven physicians who organized the American Academy of Medicine in 1876, died June 7. He was widely known for his discoveries in connection with the treatment of the alcoholic and drug habits. He was born in Pennsylvania eightyseven years ago.

Southwest Missouri Medical Society—At the annual meeting of the Southwest Missouri Medical Society, held in Springfield, May 21, the following officers were elected: president, Dr. Edward C. Wittwer, Mountain Grove; vice presidents, Drs. Otto C. Horst, Springfield, and Charles H. Orr, Ash Grove; recording secretary, Dr. Edwin F. James, Springfield; corresponding secretary, Dr. Joseph W. Love, Springfield, and treasurer, Dr. Lee Cox, Springfield.

New Officers—The fifty-second annual meeting of the Nebraska State Medical Association was held in Omaha, May 24 to 26, under the presidency of Dr. H. Winnett Orr, Lincoln. Dr. Miles S. Moore, Gothenburg, was made president-elect; Drs. Ernest A. Creighton, Red Cloud, and Wesley L. Curtis, Lincoln, were elected vice-presidents. Dr. Jas. L. Greene, Hot Springs, Ark., delivered an address on "The Treatment of Neural Syphilis." The next meeting will be held in Lincoln.

The Doctor's Wife-Pills, pulses and patients usurp the place of pleasures in the life of a doctor's wife, said Mrs. E. N. Lippincott at the Oak Lane Review Club, which held a meeting in the Oak Lane Library, Philadelphia, March 1st, according to the Philadelphia North American. Mrs. Doctor's life varies between being a glorified telephone operator, bookkeeper and bellhop, to one of those "watchful waiters." Nine years of answering about twenty-seven telephone calls a day-not to mention the sixteen times the doorbell rings and the deliveryman knocks at the back door-afford the average doctor's wife plenty of indoor sport. said Mrs. Lippincott. Fruitlessly peering from the window for hours waiting for hubby to take her to the theater or to an evening reception soon makes Mrs. Doctor conclude that there must be other amusements, if she is to have any. Also she is denied the pleasure of indulging in the gentle art of gossiping over the teacups, for doctors are the confidants of their patients and any divulgence of secrets reflects on their professional honor, and consequently the wife cannot be told anything. Mrs. Lippincott's parting advice was for girls to consider carefully

before marrying a doctor; but her contention was that the life is fine when you get used to it. For instance, you soon learn not to worry over troubles of any sort, for the simple reason that life is so full of them that it is quite useless. At first, you probably worry over other people's troubles, and also over the fact that perhaps hubby will "catch the flu" or something, but that time soon passes and Mrs. Doctor becomes calloused to misfortune like hubby.

American College of Surgeons. The next meeting of the American College of Surgeons will be held the week of October 11th in Montreal, with headquarters at the Windsor Hotel. Daily clinics will be held in the English and French hospitals; in the afternoons there will be "dry clinics"—demonstrations of cases in patients showing end results and methods of treatment; there will also be evening meetings, for which an interesting program has been prepared. This will be the first meeting outside of the United States.

Could Neither Speak nor Understand Speech.

—One of the most interesting speech defects cases among the disabled veterans of the World War is that of Private Henry J. Koopman, who suffered complete motor and sensory aphasia following an operation for mastoiditis. His hospital record showed that before the operation, Koopman spoke English without an accent. After the operation, he could utter a few German phrases, but no English. He could neither name nor locate the parts of his body. Koopman's training was started at General Hospital 11. Cape May, N. J., July 28, 1918, under an expert teacher. In two days he could count to four. In one week, he could do simple addition. In two weeks he knew three parts of his body, and could speak one connected sentence. In three weeks he could locate all the parts of his body, and began left-hand writing to develop the speech centers on the right side of his brain, to take the place of those destroyed on the right side. In September he could shave himself, tell time, and work with fractions. In November he could write with both hands. It was discovered that his previous education had been limited, but that he was a remarkable card-player and a beautiful dancer. In December he could read simple sentences, write a short letter, spell easy words, measure and calculate. His speech is broken but intelligible. He can talk for twenety minutes without stopping. Koopman has now received his discharge from the army, so that the matter of his speech training comes under the Federal Board for Vocational Education. The Board's special agent for cases having hearing and speech disabilities has arranged for Koopman to have training under the same expert teacher with whom he started training at Cape May.

Clinical Laboratory Opens Branch in Kansas City—A clinical laboratory has been installed in Kansas City by the Beebe Laboratories, Incorporated, of St. Paul, Minnesota. This laboratory is equipped to make all kinds of clinical tests and examinations and is under the supervision of a physician who has had a large and versatile laboratory including training at the Rockefeller Institute and service as director of one of the base hospital laboratories during the war period. The Beebe Laboratories, Incorporated, was organized nine years ago by Dr. Ward L. Beebe. The original quarters comprised two small rooms in an office building. By rendering a really valuable service, the Beebe Laboratories, Incorporated, have made very rapid progress and now occupy a position of note in the medical field. It is a large, well organized institution that can be depended upon in every way and deserves the united support of the profession. The installation of this branch of the Beebe Laboratories, Incorporated, is an event of special interest and importance to physicians in this territory and a valuable asset to the medical interests of Kansas City.

Flint Bone Scalpels in Bulgarian Hospital.— (Varna, Bulgaria). Awaiting the arrival of American Red Cross hospital supplies here, the three Russian doctors in Varna's one hospital are using flint bone scalpels in treating the sick and wounded from the four thousand refugees in the camp outside the city. The doctors have adopted these stone-age tools because of the lack of modern instruments and because a freshly chipped flint possesses an excellent cutting edge and a perfect immunity from infection. The Varna hospital has but eight surgical instruments which are manufactures as such, and these are too rusty for use. The only drugs on hand are two quarts of tincture of iodine, one pound of magnesium sulphae, one pound of bisulphate of soda, and a modicum of ipecac. Surgical dressings are correspondingly scarce. Crude but thoroughly clean operations are being performed with flint scalpels, while the S. S. Hamlin, containing several tons of hospital supplies, is being unloaded at Constantinople. Doctor Bashilkef, former Bulgarian court physician, decided upon the expedient of flint bone scalpels for the Varna hospital after seeing the predominating percentage of head wounds among the refugees. Such operations were successfully performed by the ancient Gauls, as their exhumed skulls clearly prove.

Physician or Saloonkeeper—Which?—We believe—and challenge contradiction—that there is not a single reputable physician in the city of Chicago today who legitimately prescribes more than one pint, all told, of whiskey per week. The vast bulk of professional men, of course, do not

even prescribe that much in a month, and large numbers none at all. Therefore, to give a physician the right now to prescribe three or more pints of whiskey each day is simply a deliberate attempt under the guise of the law to turn physicians into saloonkeepers, and we most decidedly protest. In this we are backed up by every decent member of the profession, and have obtained much evidence to sustain this assertion. They are all agreed that one book of one hundred prescription each to every physician per year is far above normal requirements and ample for any emergency of any kind whatsoever. Under no pretext should this amount be exceeded, and the number of prescriptions now allowed is simply a bid to the unscrupulous members of the profession to become bartenders and wring blood money out of the unfortunates, the inebriates. the prostitutes and criminal classes generally. We earnestly request the very efficient Director of Federal Prohibition in Chicago, Captain Hubert E. Howard, to defeat this method of fostering drunkenness and limit prescriptions to one hundred per year or less.—Chicago Med. Record.

The Standardization of Hospitals—Dr. John G. Bowman of Chicago, chairman of the committee on Hospital standardization, outlined the following minimum standard which the American College of Surgeons asked hospitals to put into effect: "(1) That membership upon the staff be restricted to physicians and surgeons who are (a) competent in their respective fields. and (b) worthy in character and matters of profesional ethics. (2) That the staff hold meetings at least once each month to review and analyze the successes and failures in the treatment of patients. (3) That accurate and complete case records be written for all patients and filed in an accurate manner in the hospital. (4) That clinical laboratory facilities be available for study, diagnosis, and treatment of patients." Such a standard would not only assure proper care and treatment of patients but would put the board of trustees of hospitals in possession of essential information which many such boards did not now receive. Among the 617 general hospitals of more than 100 beds in the United States and Canada, about 478 could not now present even a fairly complete analysis of their clinical work. It was urged that communities withhold their support, financial and otherwise, from hospitals whose trustees could not inform the community as to the character of treatment received by their patients, such as would be provided by the college's minimum standard. Matters of incompetence should be dealt with in no uncertain manner. The doctor scarcely existed who, if incompetent and his incompetence was brought to his notice at frequent intervals, would not either endeavor promptly to perfect his training or retire from membership on the staff. The same principle was true regarding character and professional ethics.—Medical Record.

A recent publication of New York Pharmacal Association upon Anaphalactic Epidermal Asthma is one of those leaflets that might be thrown in the basket unread. Don't do it. It deals with diagnosis and treatment, with specific epidermal proteins so beautifully presented as to supply information to a large majority of medical practitioners. Read it through twice, then put it away for reference.

No Dentists in the Newer Regime?—According to Dr. J. M. Levy, who is himself a dentist, the profession of dentistry should be abolished, and the care of teeth placed in the hands of the medical profession. Dr. Lyon deprecates the needless extraction of teeth. He says: "There is a rage going on all over this country for extracting teeth. More teeth are being needlessly extracted today than are receiving any other attention. Any tooth which is questioned is summarily extracted and its owner is deprived of his normal apparatus with no cause."

Narcotics Barred in Buenos Aires—Drug addiction, which has become very common in Buenos Aires and has spread to all classes of society, has made it necessary for the municipal government of that city to enact stringent regulations restricting the sale of drugs. It is now prohibitive to sell narcotic drugs except upon presentation of a prescription prepared by a registered physician. Before this, drug stores were permitted to sell cocaine, morphine, opium and other drugs with the greatest freedom. The government has established dispensaries where those suffering from various diseases requiring the administration of narcotic may procure such narcotics.

Doctors Strike for Equal pay with Washerwomen—Recent reports received from Red Cross workers in Vienna reveal that doctors and surgeons in hospitals there have declared that they cannot live on the present rate of pay, and threaten to go on strike unless their salaries are immediately raised. Their present remuneration is less than that of the lowest day laborer, the Red Cross workers say, and the doctors consider that they should have pay at least equal to that of the washerwomen in the same hospitals. The absence of essential drugs in pharmacies in Vienna combined with the very grave health situation, which has crowded every available inch of space in the hospitals with seriously ill patients, has made the task of the overcrowded medical staffs one almost beyond human endurance. Physicians attached to the American Red Cross relief mission are doing what they can to aid, but the situation is extremely serious.

The National Research Council—A cooperative organization of leading scientific and technical men of the country for the promotion of scientific research and the application and dissemination of scientific knowledge for the benefit of the national welfare, has elected the following officers for the year beginning July 1, 1920: Chairman, H. A. Bumstead, professor of physics and director of the Sloane physical lab oratory, Yale University; first vice-chairman, C. D. Walcott, president of the National Academy of Sciences and secretary of the Smithsonian Institution; second vice-chairman, Gano Dunn, president of the J. G. White Engineering Corporation, New York; third vice-chairman, R. A. Millikan, professor of physics, University of Chicago; permanent secretary, Vernon Kellogg, professor of biology, Stanford University; treasurer, F. L. Ransome, treasurer of the National Academy of Sciences. The Council was organized in 1916 under the auspices of the National Academy of Sciences to mobilize the scientific resources of America for work on war problems, and reorganized in 1918 by an executive order of the president on a permanent peace-time basis. Although cooperating with various government scientific bureaus it is not controlled or supported by the government. It has recently received an endowment of \$5,000,000 from the Carneige Corporation, part of which is to be expended for the erection of a suitable building in Washington for the joint use of the Council and the National Academy of Sciences. Other gifts have been made to it for the carrying out of specific scientific researches under its direction.

The young doctor says, what good is the medical society? The papers are seldom scientific, they are usually so long as to be boresome, and some of them presented in the past would not be tolerated in a decent similar organization. The society does practically nothing. What's the use? Does the young doctor do his share?

There are those who advocate the joining of a labor union by the medical profession. The idealist will be separated from illusions. The cold standard value is peeping over the horizon. Has it come to this?

Beyond 35, ulcer may arise from multiple infection, emboli, endarteritis, scattered infectious gastritis, which leaves areas of dead protein in the gastric mucosa to be digested away by the stomach juices.

Of course we are for a liberally endowed home for old dependent doctors. A sad and belated remuneration. Idealism at present, still leads to the poor house.

So far, experience has shown that compulsory notification is a farce. It drives patients to the quack and away from the doctor.



THE "RADIOCINEMATOGRAPH"

Combining in a single apparatus the moving picture camera and the x-ray machine, Drs. Lormon and Comandon, eminent French scientists, have evolved a marvelous new contrivance. the "radiocinematograph," which makes possible "movies" of the workings of the human body's interior organs. Medical experts attached to the American Red Cross Commission to Europe are now considering the application of the new science of radiocinematography to extensive clinical work in the centers of epidemic where the Red Cross is operating. It is hoped that its use will clear up many mysteries now surrounding diseases of an obscure naure which have so far baffled the greatest medical minds of the world.

Thanks to the new invention, which has reached the practicable stage but is not yet entirely perfected, the interior functioning of living organisms may now be viewed on the movie screen. Stripped of its opaque covering of flesh by the piercing rays of the radiocinematograph, the body's most minute details, vibrating with life, are shown. The beating of the heart, the movements of digestion and respiration, the actions of the bony articulations and the intricate network of nerves and muscles which set the limbs in motion, are depicted to the life on the screens

Discussing the invention, Dr. Lormon states that the greatest difficulty encountered in their researches was the danger of thermic infiltration by the ultrta violet rays during the photographing of subjects. To overcome this difficulty the inventors devised a method for changing the character of the rays employed, an achivement comparable to the original discovery of the x-ray.

Treatment of Quinine-Resistant Malaria With X-Rays

In those trying cases of malaria in which quinine seems to have no power to bring relief, the usual custom has been to resort to arsenical preparations, with occasional success, but more commonly failure. Recently Pais, writing in the Annali de'Igiene (June 30, 1919, xxix, 6) has tried the effect of the x-ray in this condition, and publishes the results of over 3,000 experiments along this line. His idea has been to rouse the body cells by radiation with small dose. Thus

the stimulation of the blood-making organs should enable the organism to put up a better fight against the plasmodium and its effects. We have the empirical fact to start with that the rays are able to modify favorably the fever curve. It may also be shown that with high doses the disease is unfavorably influenced. Experiments show a relative constancy in the response of the malaria-infected organism to doses of rays of the same strength, the action differing from that of quinine, which shows no such constancy. There is some difficulty in the measurement of minute doses of the rays; and the need of an elaborate technique will make progress along these lines slow. Prolonged radiation-extending over 3 or 4 hours per session—would appear to produce certain results which, however, are not calculated to appeal to the public when measured against the outlay of time and the expense. According to the clinical expression of the disease the sensibility of the organism to the rays may vary. Thus if the attack is hyperacute the sensibility to the rays is high, and the therapeutic doses small. At the other extreme there are cases termed by the author radioresistant. These cases are not benefited by quinine but the term radioresistant is used only in a relative sense, for the doses required are larger than in the preceding. Thus far the author has rayed the spleen chiefly and has studied the subsequent blood pictures, the state of the plasmodium, the fever curve, and splenic tumor. The erythrocytes are first diminished, then increased to the normal. The disappearance of the parasites from the blood is slow but apparently sure. The state of the spleen seems at first aggravated, but in a short time improvement is noted and within a few weeks it undergoes involution to the normal size.—N. Y. Med. Record.

The Human Male—What is to become of him -that is a part of him? The tendency of the age is to do away with the majority of the male. So many are not necessary for the propagation of the species. This has been demonstrated in raising fine stock. In brute animals eugenics is stressed. Nature's hand is too lavish and man is too lavish, and man (more particularly woman) is asserting rights of umpire. In cattle the unlike and unpromising are hurried off to the shambles. The horses are gelded, the cockerels caponized, the tomcats emasculated, and the men sterilized. For the last quarter of a century The Prodigal has urged that all confirmed criminals. all rapists, idiots, imbeciles, and all men who commit murder in a passion should be sterilized. The human male will be saved if he jogs along in this century, makes good and gets somewhere in reasonable time. But he must make good or meet his fate.—Exchange.



THE WESTERN ELECTRO-THERAPEUTIC ASSOCIATION

First annual meeting at the Little Theatre, Kansas City, Thursday and Friday, May 27-28, 1920.*

The association was called to order at 10 o'clock a. m. by the president, Dr. B. B. Grover of Colorado Springs. Upon motion the reading of the minutes was dispensed with, the same having been published in the official journal. The first order of business being the revision of the constitution and by-laws, the president appointed as a committee, Drs. Patterson, Nye and Nelson. Upon motion, this same committee was delegated to examine the applications for membership and make report on same at the afternoon session. This concluded the executive session, and the scientific sesison was called to order at 10:30 o'clock.

Report of standing committees by the chairmen.

"Research," O. J. Cunningham, Kansas City.

"Continuous Currents," E. E. Shaw, Cameron, Mo. "Sinusoidal Modalities," James Y. Simpson, Kansas City.

City.
"Treatment of Goitre with Report of Case," H. W. Nye, Osborne, Kansas.

"Pathology, a Helpful Adjunct in the Treatment of Many Conditions," Chas. Keown, Independence, Mo.

Upon motion, the association adjourned for lunch.
Afternoon session, 1:30 o'clock, called to order by
the president. The following papers were read and
discussed:

"Mediastinal Affections; Radiological Diagnosis" (lantern slides), Λ . C. Clasen, Kansas City.

"X-Ray and Radium in the Treatment of Deep Malignancies," G. E. Knappenberger, Kansas City.

"Cancer of the Prostate, Diagnosis and Treat-

ment." Clinton K. Smith, Kansas City.

"The Importance of Electro-Mechano-Therapy in Neuritis and Muscular Atrophy," Theo. F. Clark, Eldorado, Kansas.

At 5 o'clock the association adjourned for dinner.

Evening Session

The association was called to order at 8 o'clock by the second vice president, Dr. Theo. F. Clark, introducing Dr. Grover, who read the presidential address, "Why the Physiotherapist."

The other papers read at the evening session were as follows:

"Treatment of Tuberculosis," Jefferson D. Gibson,

"Radium and X-Ray Therapy in Inoperable Cancer of the Cervix," H. H. Bowing (Mayo Clinic), Rochester, Minn. "Traumatism and Transplantation in Cancer," D.

"Traumatism and Transplantation in Cancer," D. T. Quigley, Omaha.

Second Day-Executive Session

Dr. W. P. Patterson, chairman of the committee on revision of constitution and by-laws, read his report, and on motion it was unanimously adopted. Report of committee:

We hereby move that the Constitution of The Western Electro-Therapeutic Association be amended as follows, viz.:

Article IV, the words "in the locality in which they live" be changed to "their local societies."

Article 7, the words "It shall be endorsed by two members in good standing, or the president and secretary," be changed to read "It shall be endorsed by two physicians in good standing, or the secretary."

Article 13, that the following words be added after the words "five trustees," viz., "one of which shall be the president."

Article 19, be stricken out and the following substituted: "Article 19. The annual meeting of this association for the election of officers and transaction of other business shall be held on the date designated by the president, which shall be during the month of May or June of each year. Board of trustees may have power to change date of meeting."

"The place of meeting shall be determined by the board of trustees, who may receive invitations."

That the following new article be added to the Constitution: "Article 21. This association endorses and shall be guided by the Code of Ethics of The American Medical Association."

We hereby move that the by-laws of the association be amended as follows, viz.:

Article 6, the words "one month's" be stricken out and the words "ten days" be substituted therefor.

Article 9 should read "shall be in the hands of the secretary twenty days prior to the meeting."

Article 10, the word "second" be changed to

Article 10, the word "second" be changed to "first"; also in Art 10 the words "from time to time" be changed to "on or before Sept. 1 of each year."

Article 10. Committee on Nominations—The committee on nominations shall be elected by ballot of the association at the executive session on the morning of its first day of the annual session.

It shall consist of at least two members and shall contain one member for every fifteen fellows registered at the time the ballot is taken.

All nominations of officers of this association shall be made by members entitled to vote thereon. They shall be in writing and duly signed by the member making the nomination.

All nominations shall be transmitted to the chairman of the committee on nominations before 1 o'clock of the afternoon of the first day of the annual session.

The committee on nominations shall meet not later than the afternoon of the first day of the annual session, and the nominees for office shall be elected by the majority affirmative vote of this committee from the nominations transmitted to it.

In case of no nominations being made for any particular office, the majority affirmative vote of this committee shall determine the nomination.

The list of nominations of all officers shall be presented to the association through the report of the committee on nominations at the business meeting of the association, on the second day.

W. P. PATTERSON, H. W. NYE, E. A. NELSON,

Committee.

Upon motion, an amendment to the by-laws was adopted giving the board of trustees the power to change the meeting date, if, in their judgment, such change became necessary for the good of the society.

Upon motion the secretary was authorized to have the constitution and by-laws printed in book form, containing a roster of the association. Upon motion by Dr. E. E. Shaw, the secretary was authorized to arrange a clinical day upon the program of the next meeting.

After some discussion, a resolution was adopted as follows:

[•]NOTE: Errors and omissions should be promptly reported to the secretary. All the papers will be published in the official journal.

It is the sentiment of this association that the same qualifications be used for membership in the Western School of Electro-Therapy as required by the by-laws of this association.

The next order of business being the election of officers, nominations were called for by the chair, resulting in the election of the following officers:

President, Dr. B. B. Grover (re-elected).

First vice-president, Dr. S. Grover Burnett, Kansas City.

Second vice-president, Dr. H. W. Nye, Osborne, Kansas.

Treasurer, Dr. Chas. Keown (re-elected), Independence, Mo.

Registrar, Dr. E. A. Nelson (re-elected), Phillips-burg, Kansas.

Trustees, two years, Dr. W. P. Patterson and Dr. O. U. Need.

Scientific Session—Following papers were read: "Red Cross Work in Siberia," C. J. Cahill, Topeka,

Kansas.
"The Modern Therapeutist," L. A. Marty, Kansas

City.

"O. H. M. C. Treatment," Walter E. Scott, Adel, Ia.

Committee on credentials reported favorably upon
all the applicants for membership and upon motion
to suspend the rules, the secretary was authorized
to cast the vote of the society for the following:

Wm. R. Beattie, S. Grover Burnett, Felix Cohen, Charles J. Cahill, J. S. Cooper, O. F. Clagett, J. N. Dieter, Jefferson D. Gibson, A. R. Hatcher, E. H. Johnson, Geo. M. Liston, Herman Muller (associate), W. H. Moorhead, A. G. E. Nordlander, E. M. Owen, John H. Rinehart, J. H. Rautert, J. L. Reich, J. N. Scott (honorary), Walter E. Scott, J. H. Sampson, J. R. Shumway, J. C. Stevens, R. Willman, Dora Greene Wilson.

Dr. Patterson presented the following resolution out of respect to Dr. J. N. Scott, formerly of Kansas City, Mo., and one of the pioneers in electro-therapy and x-ray:

Whereas, The Western Electro-Therapeutic Association learns with regret of the inability of Dr. J. N. Scott, one of the pioneers in x-ray and electro-therapeutics, to be with us at this meeting on account of infirmities contracted in the prosecution of his chosen work;

Therefore, Be it resolved, that this association extend to Dr. Scott, one of the great martyrs to science, our fraternal greetings and best wishes for an early and complete recovery.

Be it further resolved, That Dr. Scott now of Peabody, Kansas, be elected to honorary life membership in our association and that the secretary convey to Dr. Scott a copy of this resolution, and further, that it be printed in the official journal of the society.

This resolution was adopted by a unanimous standing vote. Upon request of the chair, Dr. S. Grover Burnett of Kansas City made a few remarks concerning the work of Dr. Scott in Kansas City and the great sacrifices he had made in the cause of scientific investigation.

Afternoon Session, 2 o'clock

The following papers were then read and discussed:

"The Bristow Coil in Orthopedic Surgery, Experiences in the British Reconstruction Hospitals," W. E. Wolcott, Omaha.

"The Use of Ultra Violet Light in the Treatment of Tubercular Ulcers and Sinuses, Case Reports," J. H. East, Denver, Colo.

"Heliotherapy and the Work of Rollier," E. H. Skinner, Kansas City.

"Ultra Violet Ray in Dermatoses" (lantern slides), Lynne B. Greene, Kansas City.

Adjourned.

CHAS. WOOD FASSETT, Secretary.

LETTER FROM DR. SCOTT

Peabody, Kans., 6-10-20.

Chas. Wood Fassett, Secretary,

Kansas City, Mo. Dear Doctor:

Your letter and resolutions of Western Electro-Therapeutic Association received. It has been a great pleasure and satisfaction to be remembered and honored by this society. As you probably remember, I lost my right hand some years ago. About four months ago a growth appeared on the middle finger of the left hand, which could not be destroyed by radium, and it was removed. About six weeks after the removal a growth appeared in the axilla, which later broke down. I have gradually lost strength until I am confined to my room. Since radium has been used for the growths produced by the x-ray, I have been using it and destroyed a large number. I have prolonged my life by its use and I am satisfied I would have lost my left hand long ago had I not used it. It seems that the effects of the x-ray on human tissue when once produced and the trophic influence changed, no remedy has been found to bring them back to normal. I think I have used nearly all methods of destroying the growths. Radium has destroyed them for a longer period than any agent I have used. but new keratasis sometimes appear on a place which was the seat of a former growth a year or more after it was destroyed. With sincere appreciation, I remain Yours fraternally,

J. N. SCOTT, M. D.

Action of the Ultraviolet Light on the Intradermic Tuberculin Reaction-In studying the action of the ultraviolet light, Edgar Mayer of Saranac Lake performed experiments as follows: (1) Tuberculous guinea pigs were exposed to the light and then given intradermic tests; (2) tuberculous guinea pigs were given tests and then exposed to the light; (3) old tuberculin that had been exposed to the light was used for intradermic tests on tuberculous guinea pigs: and (4) tuberculous patients were given skin tests both before and after exposure to the light, while some were tested with tuberculin that had been exposed. Mayer finds that exposure of the skin to the light, both before and after the intradermic test, tends to blunt the skin reaction to tuberculin; and that tuberculin exposed to the light loses some of its capacity to produce reactions. Mayer, Edgar: An Experimental Study of the Action of the Ultraviolet Light on the Intradermic Tuberculin Reaction. American Review of Tuberculosis, April, 1920, Vol. IV. No. 2.

A Reliable Anodyne—In cases where an anodyne of prompt and definite power is wanted and particularly where the physician is eager to protect the patient from the psychical influence of a hypodermic injection, no more useful agent is at his command than Papine (Battle). Papine is powerful anodyne, a well balanced formula and prepared from the purest of drugs. Its opium content fortified by other sedatives, insured the patient getting the desired result. Given in this form the possibility of drug addition is reduced to a minimum, and the care with which Papine's constituent drugs are chosen and compounded gives a high degree of protection against the untoward effects of anodynes. Papine (Battle) may be used wherever an anodyne is indicated.



Certain Organisms Isolatetd from Cases of Influenza-H. J. B. Fry (Lancet, July 12, 1919) isolated an organism from two German prisoners during the third wave of influenza epidemic. In blood culture in glucose broth the organism appeared as round or oval. Gram negative, yeastlike bodies, and subculture produced gram negative bacilli, varying in size from coccal, or coccobacilliary, to short filamentous forms. When these minute forms were grown on six per cent salt agar the yeastlike forms were again obtained. The organism was highly pathogenic to the rat and guinea pig, producing ecchymotic and hemorrhagic lesions in the lungs, and appearing in the various tissues and fluids after death, as well as in the tracheal mucus. Another type of organism was frequently isolated from material from widely different sources in cases of influenza, appearing in the form of round or oval spores which stained deeply with gram when young, but which showed many gram negative forms in older cultures. This organism also produced a wide variety of forms in culture, including large hypal threads, lanceolate diplococci, diplostreptococci, and streptococci, varying greatly in their reactions to the gram stain. The various forms are described in detail, including a very minute coccal form obtained by prolonged growth. Such findings suggest that influenza may be of mycotic origin, but further work is needed to determine the validity of the suggestion.

Arsphenamin Reactions-According to John H. Stokes, M. D., and G. J. Bushman, M. D., Rochester, Minn. (Journal A. M. A., April 10, 1920), a certain widely distributed brand of so-called pure gum rubber tubing seems to contain, when new, a toxic agent responsible for a definite type of reaction following the intravenous administration of arsphenamin, and possibly also of alkaline solutions and transfusion mediums. The toxic substance gradually disappears from the tubing on use. The toxic substance is apparently removable in the first instance by soaking the tubing for six hours in normal sodium hydroxic solution and rinsing. The toxic property is not destroyed in the ordinary process of sterilization by boiling (from one-half to one hour), is not soluble in water or removable by irrigation, appears in toxic amounts in arsphenamin, neoarsphenamin and dilute sodium hydroxid solution merely on passing them through a new tube en route from container to vein, and is not apparently associated with the mechanically removable debris from the inner surface of the tube. The reaction induced by this agent, as obtained by the use of new tubing for interavenous injection of the substances mentioned, consists of chills coming on from thirty to sixty minutes after injection, with nausea, vomiting, diarrhea, a sharp rise of temperature, sweating, severe headache and lumbar cramps, emotional disturbance amounting at times almost to hysteria, and subsequent profound pros-tration. The reaction can be induced in typical form in dogs. The identity and toxicology of the poisonous principle are under investigation.

Arsenic in the Cerebrospinal Fluid—J. B. Berger and H. C. Solomon, Boston (Journal A. M. A.) have studied the arsenic content of the cerebrospinal fluid

in neurosyphilitic cases treated with arsphenamin. One hundred and twenty-three cases have been examined by them at arbitrary intervals after intra-They utilized a modified venous administration. Marsh technic in the analysis for arsenic which permitted the quantative recognition of a micromilligram of arsenous oxid, as a characteristic mirror. Their results emphasize the necessity, they say, of maintaining a maximal concentration of arsphenamin in the blood for longer periods than has been the practice when treating neurosyphilis. They summarize their paper as follows: "1. Of 123 cerebrospinal fluids collected at intervals ranging from five minutes to twenty-three hours after intravenous injection of from 0.3 to 0.6 gm. of arsphenamin, thirty-eight showed appreciable amounts of arsenic. 2. The largest amount found was 0.6 mg. of arsenous oxid in 1 The average amount was 0.18 mg. per cubic centimeter. The shortest interval at which arsenic was found was thirty minutes; the longest two hours. 3. With successive injections, the fluids in general show progressively smaller amounts of arsenic for the same time interval. 4. In general, those patients consistently showing the larger amounts of arsenic in their fluids made the more rapid improvement. 5. It is suggested that intravenous injections of divided doses at one or two hour intervals would prove more effective in maintaining a high concentration of arsphenamin in the blood for longer periods, and thus possibly allow increasingly greater amounts to pass into the perivascular spaces."

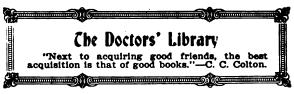
Bacteriological Control of Recovery in Urethritis -Raucayrol and Renaud-Badte (Journal d'Urologie) state that no one now doubts the possibility of recovery in chronic urethritis, but it is a difficult matter to determine when recovery has taken place, a matter of the greatest importance from the point of view of the individual, of the family and of society. The three points to be decided are: Whether the patient is liable to spread infection; whether restitutio ad integrum of the urethra has taken place; whether relapse may not occur at a short or longer interval. It is not within the scope of the article to enumerate the different methods of treatment, but to point out the way to decide whether it has been efficacious in curing the lesions produced by the bacteria. problem is to bring to light the bacteria which have been lodged in the urethral tissues. After the mucus threads have disappeared, the urine has become normal, and the urethroscope shows a normal appearance of the mucous membrane, it is then necessary to make a test for the presence of bacteria in the tissues. This is done by applying 5 per cent nitrate of silver solution to all parts of the urethral mucosa under urethroscopic control. The patient is then directed to drink one or two litres of beer. The nitrate of silver has the property of causing a contraction of the muscular coat of the sub-mucosa, and emptying in this way the numerous crypts of the mucous membrane. Beer is the best known medium for the development of the microorganism. The patient must then retain the urine for at least six hours. This is absolutely essential. The meatus is then to be washed with soap and recently boiled water, and a coverglass preparation made from the meatus and from the urethra 1 centimeter from the opening. The urine is then caught in 3 portions. The first 10 c.c. represents the washings from the urethra and may contain mucous threads. The character of the second and third portions gives an idea of the condition of the bladder and prostate. The first portion of the urine is centrifugalized, and cultures made on ascitic agar, in ascitic broth, and on 50 per cent horse serum from the precipitate. The smears direct from the urethra, and the

cultures in case there is any growth are examined by Gram's method. Cultures should also be made from the spermatic fluid caught under aseptic conditions. Examinations carried out in the manner above described have shown that the gonococcus is more readily got rid of than the staphylococcus, and that the colon group and pseudodiphtheria are midway between. In view of the relatively innocuous character of the staphylococcus, marriage should be permitted in case the gonococcus has been found to be absent.—Neurologic Cutaneous Rev.

Authrax—A man, aged 18, clerk in a mining office, noticed a small nodule on the left side of the neck just below the ear. Swelling of the neck began immediately. The following day, he consulted the physician at the mine and hot compresses were applied. Twenty-four hours later the symptoms had progressed rapidly. When Gerald R. Allaben, M. D., Buhl, Minn. (Journal A. M. A., April 10, 1920), saw him the temperature was 104 F.; the pulse, 130, and respiration, There was extreme swelling of the neck and face extending around to the right side and down to the left breast, and marked edema of the throat involving the uvula. Breathing was embarrassed and noisy, and there was great difficulty in swallowing. The patient complained of no pain, except the discomfort from the edema. The blood count revealed 26,000 leukocytes. The urine was negative. lesion at this time was about the size of a nickel, and distinctly firm and indurated; the edges were raised and dotted with small vesicles containing a clear yellow serum. The center of the nodule was depressed, dark in color, and narcotic in appearance. Smears from the lesion showed anthrax bacilli, some specimens showing the characteristic spore formation. The nodule was thoroughly excised under local anesthesia. The base was cauterized with 95 per cent phenol (carbolic acid), and the surrounding subcutaneous tissues were injected with 5 per cent phenol. A dressing of 95 per cent alcohol was then applied. Cauterization was repeated twenty-four hours later, and alcohol dressings were continued. The patient's condition did not improve, however. The edema remained unchanged. The patient became restless and noisy; the temperature remained high, reaching 105 at the last; the pulse grew weak and more rapid; leukocytes increased to 42,000; and death took place forty-eight hours after admission to the hospital, and four days from the onset of the infection. A new shaving brush was the cause of the infection. The patient had bought a new brush one week before, and had used it only twice, the last time being the night before the appearance of the nodule on his neck. brush was secured, and sent away for culture, but was apparently destroyed without examination.

All cases of diarrhea, of mucous or bloody evacuations, of obstipation that do not promptly subside under medical treatment, should be investigated for a gross lesion of the bowel—by roentgenography, proctoscopy and sigmoidoscopy.

The red rose breathes of passion,
The white rose breathes of love;
Oh, the red rose is a falcon,
The white rose is a dove.
But I send you a cream-white rosebud,
With a flush on its petal-tips,
For the love that is purest and sweetest,
Has a kiss of desire on its lips.
—John Boyle O'Reilly.



THE HOGDEN WIRE CRADLE EXTENSION SUS-PENSION SPLINT—By Frank G. Nifong, M. D., F. A. C. S. Published by C. V. Mosby Company, St. Louis, Mo. 124 illustrations. 162 pages.

This brochure of 162 pages is a discourse on the various methods of treating fractures of the lower extremity in general, and on the method of treating such fractures by the Hogden Wire Cradle extension suspension splint in particular. The various methods are enumerated for the purpose of showing that all of them do not accomplish the purposes intended as fully as does the Hogden splint which is simple, easy to apply and yields fine functional results with a minimum of discomfort to the patient undergoing treatment. One chapter is devoted to the use of the Hogden splint for the arm and forearm also. book is very complete, well illustrated, an essential in dealing with such a subject and shows care and thought in its preparation and reflects much credit upon its author. Dr. Nifong is one of the prominent surgeons of Missouri and his friends in this state congratulate him upon the production of a book that is a distinct contribution to the treatment of fractures.

DANIEL MORTON, M. D., F. A. C. S.

A MANUAL OF EXERCISES FOR THE CORRECTION OF SPEECH DISORDERS—By Mary Kirk Scripture, B. A., Instructor in Speech. Columbia University (extension and summer session): Director of Speech Correction, Vanderbilt Clinic, Neurological Department, College of Physicians and Surgeons, New York City, N. Y.; Lecturer at State University of Iowa, 1918, and Eugene Jackson, B. A., in charge of Speech Correction at the University and Bellevue Hospital Medical College Clinic, New York City, N. Y. Illustrated. Philadelphia: F. A. Davis Company, Publishers. Price, \$2.00.

A very unique and valuable work, having for its object the use of correct language, not from the viewpoint of grammar, but rather anatomically, in framing words by the voice organs, and in correcting nervous and careless habits to which the American people are much given in their use of language. large percentage of us murder the Queen's English, not in the framing sentences but in enunciation, in slurring vowels, in hesitancy, in catching breath in putting "er" on words, in chopping off final letters or syllables or otherwise make our language unintelligible in business, in public speaking, in general conversation so much so that embarrassment occurs and time is lost or mistakes occur which are needless and crippling. A proud citizen of the English tongue should be as careful of the use of language as of dress or decorum. This manual is of value in calling our attention to a national shortcoming which is growing, and at once gives us a method of escape from the unfortunate possibility of degrading a language which we feel to be the leader in civilization. The book is especially valuable today when we are demanding that all people of our country use our lan-While we are pushing this demand let us give it to new citizens in its purity. The book is very timely, is scentifically correct in its methods and should be read by all lovers of pure language. J. M. B.

NOTE—The Medical Herald's Kansas City office will supply any book reviewed in this department at publisher's price, prepaid. If an order for two books be sent at any one time, the purchaser will be entitled to a six months' subscription to the Herald. This plan is arranged for the convenience of our readers, and we trust it will stimulate trade in the direction of good books.—Editor.

PATHOLOGICAL TECHNIQUE—A practical manual for workers in Pathologic Histology and Bacteriology, including directions for the performance of autopsies and for Clinical Diagnosis by Laboratory Methods. By F. B. Mallory, M. D., Associate Professor of Pathology, Harvard Medical School; and J. B. Wright, M. D., Pathologist to the Massachusetts General Hospital. Seventh edition, revised and enlarged. Octavo of 555 pages with 181 illustrations. Philadelphia and London: W. B. Saunders Company, 1918. Cloth, \$3.75.

This seventh edition attests the value of popularity of this complete manual of pathologic technique. It has been rearranged with the object of making it more valuable. It appeals to the beginner as well as the advanced worker in this field. It is so complete regarding formulae and methods as to adapt itself ideally to the physician who does only a limited amount of work with the microscope, test tube and incubator. It has equal value to the more mature worker, giving as it does the last word in stains, methods and opinions. Every autopsy presents for solution its own problems, simple or complex. solution of the problem often requires the highest skill in postmortem, bacteriologic and histologic technique, therein lies the fascination of pathologic work. The author gives much space and time to the methods and interpretation of the autopsy. Of additions, the following deserve mention: Goodpasture's acid polychrome methylene blue stain for frozen section of fixed tissue and also for demonstrating metachronatically the different granules in the islet and acinar cells of the pancreas; Graham's oxidase stain for granules in the mycloblastic series of cells and leukocytes; Benian's Congo red method for the demonstration of spirochetes; Claudius' stain for flagella and the approved method of classifying pneumococci with reference to serum treatment.

QUARTERLY MEDICAL CLINICS, JANUARY, 1919—A series of consecutive clinical demonstrations and lectures by Frank Smithies, M. D., at Augustana Hospital, Chicago. Vol. 1, No. 1, published by Medicine and Surgery Publishing Co., Inc., Metropolitan Building, St. Louis.

A new departure in medical journalism, and one which promises to be popular. Popularity will hinge not so much upon being the work of a single clinician, but because of the happy swing of Dr. Smithles' manner of equalizing cases. The clinics—fifteen in all are medical and not surgical. They are clearly discussed; at times in an elementary vein, but philosophically so far as mixed assembly. All phases of the cases are scientifically set forth, clinically, with laboratory findings and x-ray cuts where indicated. The series of cases are those which would be met in the day's work of a general practitioner, and are so delightfully analyzed with diagnosis clearly deducted, as to be of distinct value to any medical man removed from large clinical centers. The scheme has been evolved from the benefit accruing from the author's habit of outlining his clinical data and giving each student a mimeographed copy, rather than leave the student depend upon his own notes. The series will be well received by medical men and keenly appreciated. The author is to be commended upon the happy idea and its elaborate execution. J. M. B.

DISEASES OF THE MALE URETHRA, INCLUDING IMPOTENCE AND STERILITY—By Irving S. Koll, B. S., M. D., F. A. C. S., professor of Genito-Urinary Diseases, Post-Graduate Medical School and Hospital; Associate Genito-Urinary Surgeon, Michael Reese Hospital, Chicago. Illustrated. Published by W. B. Saunders Company, Philadelphia and London, 1918. Price, \$3.00.

This is a small hand book of 134 pages, and the author treats with understanding that urethral conditions should be treated intelligently and not with different injections. The chapters on the treatment of sexual disorders are very good, and there is much of real value to be found in this book.

THE WASSERMANN TEST—Charles F. Craig, A. M., M. D., Lieutenant Colonel Medical Corps, United States Army. Formerly Assistant Professor of Bacteriology and Pathology Army Medical School, and George Washington University. Commanding Officer Department Laboratory, Central Department United States Army, Ft. Leavenworth, Kansas. Illustrated with colored plates, halftone plates, and fifty-seven tables. C. V. Mosby, 1918. St. Louis, Mo.

Evidently syphilitic infection has become a routine requirement. The importance of accuracy in diagnosis in this disease, which has so wide a bearing on certain conditions, that intensive studies based on immunology resulted in the discovery of the Wassermann test, and a vast literature accumulated on the value of the test. The author has placed before the profession a convenient outline of the value of the test, the technic and recent modifications, methods, elements of error, etc., and he is an unquestioned authority on the subject.

THE PERITONEUM, Vol. 2, DISEASES AND THEIR TREATMENT—By Arthur E. Hertzler, M. D., F. A. C. S. Surgeon to the Halstead Hospital, Halstead, Kansas; Associate Professor of Surgery, University of Kansas, etc. St. Louis: C. V. Mosby Company, 1919.

In this second volume the author gives a very complete detail of the diseases of the peritoneum in a most thorough manner, not only from a clinical viewpoint, but as well the theories where they exist. Peritonitis, clasification, etiology, pathogenesis, symptomatology, diagnosis, prognosis, causes of death in peritonits, treatment and operations. Part 2 deals with appendicitis, cholecystitic peritonitis, gonococci, pneumococcic, puerperal, traumatic, fetal. Tuberculosis, thrombosis and embolism of messenteric vessels, diseases of omentum and tumors. It does seem that there is nothing left unsaid regarding the peritoneum to make the work attractive to the internist as much so as the surgeon. Each subdivision is thoroughly covered and liberally illustrated—there are 230 cuts. J. M. B.

DIET IN HEALTH AND DISEASE—By Julius Friedenwald, M. D., Professor of Gastro-Enterology in the University of Maryland School of Medicine and College of Physicians and Surgeons, Baltimore, and John Ruhrah, M. D., Professor of Diseases of Children in the University of Maryland, and College of Physicians and Surgeons, Baltimore. Fifth edition, thoroughly revised and enlarged. Philadelphila and London: W. B. Saunders Company, 1919. Octavo of 919 pages. Cloth, \$6.00.

The importance of diet as a factor in the maintenance of health or as a therapeutic agent in disease is not accorded the study it deserves by the American profession at large. Many of us get a few broad general principles merely, never go beyond, and realizing but little benefit from our cursory glance, cease study. Friedenwald and Ruhrah, in their work, are not followed by as large a number of medical men as the work demands. The volume is collosal in its scope, nót a mere text book, rather a reference work. The commendable feature of the work lies in its broad applicability, ready reference aspect and wide scope. Instead of dealing with the philosophy of dietetics, it discusses very fully the composition of food stuffs and their utility to the case in hand, and outlines diet lists which may be used by those who have lacked intensive training. How well this policy has been appreciated by the profession is attested by the demand for this fifth edition, yet, were the subject more broadly employed, this fifth edition would be at once exhausted. The bulk of the work is devoted to the sick, the one aim is to enable the doctor to give his patient the benefit of dietetic care and have the nurse follow justly proved lines of feeding. If one is so guided by a single work on the subject. this volume will answer the purpose most admirably, because of its broad field and very practical aspect. J. M. B.



HARD WORK

By Homer Clark Bennett, M. D., Lima, Ohio. Hard work is the hammer that drives the nails Of certainty into success, Who misses the nails is one who fails, And works on the job less and less.

Long hits bring applause, but it's team-work wins The pennants for which we all strive; Though some by their wits may seem to make hits, None but the workers survive.

There's many a man, has all through life, A promising future ahead, Who never redeems the pawn of his dreams, Whose note is a promise that's dead.

The reason most men fall down by the way
Is that they don't "try, try again";
"Tis surely a crime to waste all our time,
Resolving, not doing, like men.

Do big things this year, determine to win, And let us all strive with our might; When we are inclin'd, we always can find The time to do anything right.

Big opportunities come to big men,
My dear boy, remember that fact;
Then let us grow so the whole world may know
That when the time comes we will act.

The fellow that lands the orders, is he
Who knows how to orders obey,
And if he will work and not try to shirk,
You'll hear his report some fine day.

Nothing succeeds like success, we are told, But drones cannot figure out how; A thing well begun, is easily done; We don't live tomorrow, but NOW.

PEACE

The wan, exhausted world lifts up her head From brooding on her dead, To catch the message clamoring down the sky That heralds what is finished at Versailles. Into her faded eyes creeps heaven now; Forgotten joy grows fair upon her brow; Her hands, unclenched, fall open and outreach To touch that future she so yearns to teach The errors of the past—the woe, the wrong, That comes from being strong. If justice and if love are laid aside Peace! The awaited word rings wide, Fraught with the beauty of the summer's day, That broke from storm to greet it, as a play Breaks on a darkened house in sudden light When the first curtain's rising gives to sight Some scene where we, expectant, lean to see A dream take flower-or fail us utterly. So waits the universe before this Word That sounds upon her heart! Have we then heard As surely as an actor hears his cue? Or shall we fail in things that we must do To make the dream come true? -Edna Mead in the New York Times.

ELSIE JANIS TO "OUR BOYS."

The war over, and she again behind the footlights of America, Miss Janis has voiced something of the pleasant regret with which she looks back upon those months, in the following poem, "La Guerre Est Fini"

Well, boys, la guerre est fini And of course we all are glad, But as time rolls on we'll realize That the war was not so bad. Of course it had its drawbacks But it had its glories, too, And to me my greatest glory was That I got to know you. To know you in your hardships, To know you in your joys, To know that my life's finest hours Were spent among you boys. In dugout or in Y hut, In boxing ring or trench, I loved to see you smile at me And yell in doughboy French: "Bon jour, comment to hell etes vous?" Or sing my songs with me. Oh, boys, I know it's selfish But I'm sorry it's fini.

So as a boy remembers
The dear old swimming hole,
And as a girl remembers
The first kiss her sweetheart stole,
Just as your mother still can see
Your golden baby locks,
So are the days I spent with you
Locked in my memory box.
The war is dead, long live the war
And the memory of the men
Who fought and died or lived through hell
To come back home again.
So let us laugh and let us say
"Thank God! We're through." And yet
Let's breathe a tiny little prayer
Each day—lest we forget.

-Elsie Janis in the Home Sector.

THE BABIES LIVE!

(Suggested by "Flander's Fields")
O ye, who sleep in Flander's field,
Your purpose now is clear revealed.
You faltered not, with courage high,
You gave your lives, you gave your all.
We hearken to your clarion call—
Take up your work, the Babies save,
Fit offspring of their fathers brave—
This pledge we give to ye who lie
In Flander's Fields.

To give your country its birthright,
You fought a valiant, selfish fight.
Shall it be said ye died in vain?
The Babies are the country's Might.
We give them health for their birthright,
Clear-eyed and strong—a vision bright
For ye who fell in blood and pain
On Flander's Fields.

O not in vain your blood and prayers,
The fullness of this earth is theirs—
The Babies live, tho' ye did die!
And that your country shall endure
They shall be strong, they shall be pure!
This pledge we give to ye who lie
In Flander's Fields.

—U. D. E. P.

DROPSY

Indications:
Dropsy of any origin,
Bright's Disease,
Valvular
Diseases,
Heart Trouble
following Influenza, Cirrhosis,

Anasarca.

This is an advertisement of our sole product, into which we put all our efforts to produce as nearly a perfect remedy as possible, for just two of the many ailments of humanity which you are called upon to treat.

DROPSY AND HEART DISEASE

ANEDEMIN doesn't always relieve even these, but it will give you a better result in a greater number of cases than any other remedy, and do it without danger to your patient and with no bad after-effects. It has no cumulative action and produces no stomach disturbance; is a powerful diuretic without irritating.

Sample, literature with formula to physicians.

ANEDEMIN CHEMICAL COMPANY, Chattanooga, Tenn., U. S. A.

Aneden	ain Cl	nemical
Com	pany,	Inc.
Chattar	100ga,	Tenn.
0	-1	d baakles

Name	M	. D.
City		

Notes on Reliable Remedies

Cascara in Constipation—Cascara sagrada is unique. There is a distinct advantage in using it in the treatment of chronic constipation. For example, it stimulates the muscular structure of the intestine, thus promoting normal peristalsis. It activates the intestinal follicles, thus augmenting glandular secretion. Moreover, this stimulating effect is mild, not excessive. It approximates the work of Nature and is therefore not harmful or retroactive. To state the case in another way, cascara unloads the bowel in a normal manner and not by exciting violent and painful peristaltic movements and tenesmus, which not infrequently attend the use of the conventional purgative. No other drug replaces cascara sagrada, which alone can be given for long periods without detrimental effect. In fact, success in its use depends upon its continued administration, in gradually ascending doses, until a natural daily action has become the fixed habit. The original bitter fluid extract, introduced by Parke, Davis & Co. in 1877, is the preferred preparation in most cases, because of its well known bitter-tonic affect. It is given in doses of 5 to 30 drops, according to the condition to be met, and this dose may be continued for several weeks in chronic cases. In more obstinate cases the initial dose should be increased gradually until the desired result is attained. At this point a progressive tapering off system of dosage is adopted, rather than an abrupt cessation of the treatment. For patients who cannot or will not take the bitter medicine, Cascara Evacuant is recommended. This is a palatable extract from which the bitter principle of the drug has been removed. It is well to remember, however, that the bitter fluid extract can be taken in gelatin capsules which are supplied to the patient with a medicine dropper. The prescribed dose is dropped into the captule, which is then closed and swallowed with no suggestion of its contents.

The importance of Prophylaxis—The death rate in the army from preventable diseases was exceedingly low. Vigorous efforts were made to lessen the dangers from infectious and communicable diseases. And the results were magnificent. It is impossible to enforce discipline upon a civilian population without the use of the police power. The medical profession desires to lower the mortality rate and is equally keen to decrease the morbidity rate. Education has proven to be a most effective weapon and for this reason information is constantly being dissenimated concerning the methods of disease prevention. A wider knowledge concerning the superior antiseptic and disinfectant value of Dioxogen is therefore of practical importance. The conscientious physician appreciates the gain in personal hygiene that follows the securing of cleanliness of the naso-oral areas. Thus is the popularity of Dioxogen as a prophylactic accounted for. Its extensive use as a mouth wash, gargle, spray, irrigation and topical application is a tribute to its potency as a germicide and a recommendation of its effectiveness as a hygienic measure. Its employment in surgery as a means of cleansing and disinfecting abscess cavities, infected wounds, ulcers, and malignant growth has contributed greatly to the satisfactory results attained in the treatment of such conditions. Service of this nature is not to be underestimated but nevertheless the field of greatest usefulness lies in the realm of

RESULTS COUNT

FROM THE SURGEON IN CHARGE OF ONE OF THE AMERICAN SMELTERS SECURITIES COMPANY'S PLANTS. (Name to physicians on request)

"There has not been a day since I came here that I have not used Dionol ointment in from 1 to 15 cases. I would be lost without it. I have used it with complete success in many severe burns, wounds, bruises, strains, etc. Have cured two severe bubos with Dionol ointment applications without operation.

"I have been particularly pleased with the way new skin forms on extensive burns and abrasions under the use of Dionol ointment. The indication for its use is very simple and is simply INFLAMMATION. For instance, here is a case that an eye and ear specialist might scoff at but I am stating FACTS. Mr. P. came to me with a suppurating middle ear, a case of 6 months standing. Daily applications of Dionol ointment against the ear drum for two weeks cured the case completely. In infected wounds and ulcerative conditions generally, there is but one word that describes Dionol results and that is 'Remarkable.'

"I have recommended the Chief of the 'Safety and Welfare Department' of our Company to use Dionol at all our other plants."

Signed——M. D.

DOCTOR:

If Dionol is new to you why not interest yourself at once in a therapeutic agent of such unusual value. Send for literature, case reports, samples, etc.

THE DIONOL COMPANY

864 Woodward Avenue

Detroit, Mich. (Dept. 41)

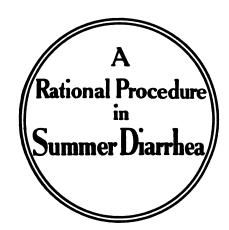
prophylaxis, particularly as a means of lessening the spread of diseases originating in the naso-oral tract. In the home, shop, factory, and office, Dioxogen meets a constant need. Long used with satisfaction as part of first aid routine when indicated, it has an even greater function as the first aid in naso-oral prophylaxis. Its bactericidal power and safety; its tastelessness and odorlessness; its efficiency and reliability; its purity and freedom from objectionable action, unite in making it a particularly serviceable agency in preventive medicine.

The Doctor's Laxative—Abbott's Saline Laxative is one of the few preparations of its kind, which has never been advertised to the public in newspapers or magazines. This is the original effervescent magnesium sulphate preparation, recommended originally some fifty years ago, by that great French clinician, Burggraeve. Dr. W. C. Abbott transplanted into this country some thirty years ago, the Burggraevean principles, among which was the clean-out, clean-up, and keep-clean idea, made famous by this slogan, and backed by Abbott's Saline Laxative. During all the intervening years, this product has been ethically advertised to the medical profession, and has indeed become the favorite prescription of discerning doctors, who recognize in "Abbott's" the standard Saline Laxative of guaranteed purity and proven quality. Samples will be sent upon request, to The Abbott Laboratories, Chicago, Illinois.

Tetanus Antitoxin—During the last few years there has been an increasing percentage of success in the treatment of tetanus. Greater confidence in the efficacy of antitoxin, especially in large doses, and broadened in intravenous and intraspinal medication, have probably contributed largely to the result. Although there is still some controversy as to the rela-

tive value of these two methods of administering antitoxin for the tetanus, in actual practice phylicians do not spend time, in the presence of the disease. arguing the merits of such questions. They use every method that is available. The most important consideration, after all, is that antitoxin be used in liberal quantity. By far the better thing to do when possible, however, is not to depend upon the therapeutic possibilities of antitoxin, but to take advantage of its prophylactic properties. Fifteen hundred units administered hypodermically at the time of injury may equal in value thousands of units intravenously and intraspinally after the appearance of symptoms. In no disease is it shown so conclusively that an ounce of prevention is better than a pound of cure. Physicians, of course, want first an antitoxin that is potent, pure, and concentrated, but of low total solids, to safeguard the patient's interests. After that they want a convenient package, a syringe free from complications, and as nearly as possible ready for use. Eli Lilly & Company state that they have just such a preparation and package. concern's years of experience in manufacturing and the reputation enjoyed by it are sufficient guarantee of the therapeutic and prophylactic value of all of its products.

Sequella of Flu—The consensus of opinion among active prysicians seems to be that there has been, during the past year or so, a great increase in the number of cardiac functional disorders. One very prominent sequella of the recent epidemic of influenza seems to be a depressed action of the heart accompanied by a great deal of physical weakness. Such cardiac action is apparently functional and is not accompanied by any evidence of organic lesion. Its treatment is best affected by the administration of therapeutic agents which strengthen and regulate



For Infants of any age

Mellin's Food

4 level tablespoonfuls
Water (boiled, then cooled)
16 fluidounces

Give one to three ounces every hour or two, according to the age of the baby, continuing until stools lessen in number and improve in character.

Milk, preferably skimmed, may then be substituted for water—one ounce each day—until regular proportions of milk and water, adapted to the age of the baby, are reached.

the heart's action and for this purpose, nothing is so good as Anasarcin Tablets, which contain one of the active principles of squill, which is a dependable and safe cardiac tonic. The many physicians who already know and use Anasarcin Tablets in the treatment of dropsy, will, no doubt, be prompt to use the tablets in the treatment of cardiac neuroses and it is well to bear in mind also that this preparation is of decided value in the treatment of exophthalmic goiter.

Aftermath of Winter-There is a well marked tendency on the part of many physicians to resume the use of cod liver oil, not only as a general tonic and builder, but also to relieve those troublesome and persistent coughs which have been described as hang-overs from the winter season. Cod liver oil has been for years recognized as a very valuable agent in the treatment of anemia and has been claimed to restore the normal blood count more rapidly than the administration of any other agent, even including iron. Objection on the part of patients to cod liver oil can be entirely done away with by prescribing it in the form of Hydroleine, the old and famous Crittenden product, which is now being marketed by the Century National Chemical Co., 86 Warren St., New York City. Samples and literature of Hydroleine will be sent gratis to any physician on request.

Tranquilizing Neurasthenics—One of the most important points to remember in the treatment of neurasthenia—especially sexual neurasthenia—is the need for rest. An abundance of sleep in these cases not only gives their nervous systems increased recuperative opportunities but renders their lives less wearing though reducing long hours of wakefulness, and thus, their periods of introspection. While

an agent of hypnotic potency must be chosen, yet it must be one that will not produce evil consequences, such as gastric distress or mental depression. For this purpose, in these neurasthenic patients, Pasadyne (Daniel) is of distinctive value by reason of its soothing influence upon the higher centers and its power to bring about restful sleep without bad aftereffects. In addition to its soothing influence upon the vital centers, it stabilizes the nervous system in general. Pasadyne (Daniel) being but a concentrated tincture of passiflora incarnata, does not subject patients to the danger of habit-formation. Hence, it may be continued for long periods. A sample bottle may be had by addressing the laboratory of John B. Daniel, Inc., Atlanta, Ga.

When Bromides Are Needed-There are cases that respond only to the use of bromides, and in their treatment the physician must employ the greatest care to choose a combination that will distress the patient the least. For instant, in epilepsy, where the bromides must be continued for long periods of time, the utmost caution should be taken to secure a preparation compounded of the purest salt and one calculated to produce a maximum of therapeutic power with a minimum of untoward effect. The physician will find in Bromidia (Battle) such a preparation. It is a carefully compounded, well balanced combination, and one well adapted for those cases where the bromides must be continued for a long period. Bromidia (Battle) has been relied upon by a large part of the profession for many years. Its continued growth in favor during these years is the best evidence of its therapeutic worth.

Tongaline promptly rids the system of any and all sorts of poison, making it an ideal eliminant.

To Produce Results

AN AUTOGENOUS VACCINE MUST BE

Skillfully Prepared

Bear in mind the importance of accurate isolation and identification of the causative organisms.

Consider the finished technique required in preparation and devitilization. Counting the suspension must be performed with accuracy, because upon this is based the dosage. Finally, the prescription must conform with the best principles of Vaccine Therapy. Such work should not be entrusted to inexperienced technicians, but should be performed only by a truly scientific staff such as that of the BEEBE LABORATORIES, INC.

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For Special Information and Culture Containers, address

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Kansas City, Mo.

Home Office and Laboratories, St. Paul, Minn.



Grape Ola, the new natural fruit drink. Try it See coupon on page 65 this issue.

Dr. Frank P. Norbury, Jacksonville, Ill., has been appointed neuropsychiatrist to the Wabash Railway System.

Hay Fever—Doctor, consult your own interests. Cure the hay fever. See page 160, and send for a "Perfection."

For Goitre—Doctor, you should try the special goitre tablets put up by the Columbus Pharmacal Co., Columbus, O. One trial will convince you. See announcement in this issue.

Dr. Wm. W. Duke, of Kansas City, was married to Miss Frances Thomas, in Colorado Springs, on May 18. Dr. and Mrs. Duke will be at home in Kansas City after July 1.

Drs. Donaldson & Knappenberger, 738 Lathrop Building, wish to announce the opening of a branch x-ray laboratory, suite 501-2 Westover building, Thirty-first and Troost, Kansas City, Mo.

Public Health Meeting Postponed—The date of the annual meeting of the American Public Health Association at San Francisco has been changed from August 30 to September 13 to 17. The change was necessitated by the state election which is set for August 30.

Dr. Burton B. Grover, president of the Western Electro-Therapeutic Association, is spending the month in New York, Philadelphia and Atlantic City. On his return our readers may expect some late news notes on what the "Big'uns" of the East are doing in electro-therapy.

Intravenous Medication—If you wish to give your patients the benefit of the latest, up-to-date treatment for anemia, syphilis, and skin diseases, write for clinical data to the New York Intravenous Laboratories. 110 East 23rd street, New York City. See announcement on page 59, advertising department of this issue.

New State Officers—At the annual meeting of the Iowa State Medical Society held in Des Moines, May 12 to 14, under the presidency of Dr. William L. Allen, Davenport, the following officers were elected: President, Dr. Donald Macrae, Jr., Council Bluffs; president-elect, Dr. Alanson M. Pond, Dubuque; vice-presilent, Dr. Campbell P. Howard, Iowa City; secretary, Dr. Thomas B. Throckmorton, Des Moines (reelected); treasurer, Dr. Thomas F. Duhigg, Des Moines (re-elected), and editor, Dr. David S. Fairchild, Clinton (re-elected).

Government Regulates Use of Hot Springs—The government is making complete regulation with reference to the use of hot waters prescribed by physicians at the Hot Springs, Ark., reservation. This is accomplished by a provision in the Sundry Civil Bill which has just passed the House of Representatives and gives the Secretary of the Interior authority to assess and collect reasonable charges from physicians for the exercise of the privilege of prescribing the mineral water at the reservation. The money received from the exercise of this authority will be used in the protection and improvement of the reservation. The purpose of this regulation is to permit only registered physicians to prescribe the waters; to prevent improper charges, and to maintain high medical standards.

The Peculiar Advantage of the Marvel "Whirling Spray" Syringe

is that The Marvel, by its centrifugal action dilates and flushes the vaginal passage with a volume of whirling fluid, which smooths out the folds and permits the injection to come in contact with its entire surface.

Prominent physicians and gynecologists everywhere recommend the MARVEL Syringe in cases of Leucorrhea, Vaginitis and other vaginal diseases. It always gives satisfaction. IT IS

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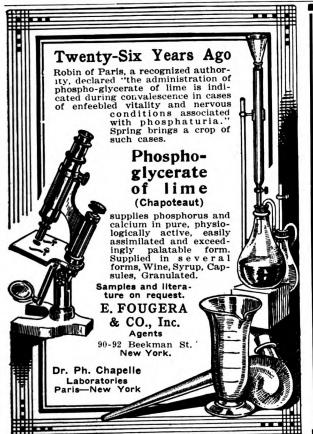
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The Marvel Company was awarded the Gold Medal, Diploma and Certificate of Approbation by the Societe D'Hygiene de France, at Paris, October 9, 1902.

All Druggists and Dealers in Surgical Instruments sell it. For literature, address

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NEW YORK



DOCTOR

Just try GOITRE SPECIAL TAB-LETS on one patient and be convinced of the permanent benefits received.

Time required for treatment varies with different patients.

Gaitre Special Tablets

have been thoroughly tested by the Profession and sold to Physicians only for the past six years on their merits.

Certainly your patient should have the advantage of this treatment.

Manufactured by

The Columbus Pharmacal Co.
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R Creosote Formalin Iodin Comp. by Inhalation, for all respiratory infections

THE PERFECTION INHALER

By Natural, Easy Inhalation Gives Efficient Service

Hay Fever patients stay at home in comfort by the use of this method. "FLU" preventive and successful treatment for doctors, nurses and patients.

To Physicians on receipt of price, inhaler and Compound by mail, \$1.00, or six for \$5.00. Cash with order.

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Golden Opportunities BARGAINS FOR YOU

Bargains in Electrical Apparatus—Portable Vulcan coil, type A, will do all bone work. Two good tubes. Make me an offer. Address Electric, care Medical Herald.

Systematic Development of X-Ray Plates and Films—By Dr. Lehman Wendell. Illustrated. \$2.00 postpaid. Supplied by the Medical Herald and Electro-Therapist, Kansas City, Mo.

New Sex Book—A practical, common sense, plainspoken little book on the sexual functions, by Mary Ware Dennett. Price, 25c, postpaid. Address Book Department, Medical Herald, Kansas City, Mo.

Pulmonary Tuberculosis, Diagnosis, Prognosis, Prevention and Treatment—By Dr. J. D. Gibson, Denver, Colo. Illustrated. Just out. \$4.00. Supplied by the Medical Herald and Electro-Therapist, Kansas City, Mo

Bathing Girls—Just out. Pretty, modest and fascinating pictures for the doctor's sanctum. Fifty cents each; five pictures, all different poses, for \$2.00. Address Art Department The Medical Herald, Kansas City, Mo.

Principles and Practice of Roentgenological Technique—By Dr. I. Seth Hirsch, New York City. 260 pages, 348 illustrations. Just out. Cloth, \$10 net, postpoid. Supplied by the Medical Herald and Electro-Therapist, Kansas City, Mo.

"Poems the Doctor Should Know"—16 pages, 45 poems of war, love and patriotism, including the immortal poem, "In Flanders' Fields," by McCrae, and several answers to its challenge. Price 10 cents a copy, three for 25 cents. The Medical Herald, Ridge Building, Kansas City, Mo.

Doctor, if you receive a copy of the Medical Herald and are not a subscriber, please take it as a cordial invitation to remit a dollar and receive our magazine for the year 1920. Turn to advertising page 68 and note the feast of "Good Things To Come" in the early issues of the Medical Herald.

The Grover X-Ray Dose Indicator—Shows the correct dose for fractional, semi-intensive and intensive treatment. Will translate immediately all the different methods employed for measuring the x-ray intelligently. Price \$3.00, by registered mail. Address The Medical Herald and Electro-Therapist, Kansas City, Mo. Send for circular.

Want to Buy a Chair or Electrical Equipment?—Doctor, have you something to sell or exchange? Do you want a location or an assistant? Are you looking for new opportunities? Use and read this column. Ads two cents a word. Remittance should accompany order. Address Bargain Department Column, The Medical Herald.

The Doctor's Tire—Before another issue of the Herald goes to press, the Ace Hurd Tire and Service Company will be located in their new building, 1924 Grand avenue. This company handles the Goodyear tires and Evergreen tubes and are the distributors for Superior storage batteries. Day and night free road service for tires and batteries. Doctors are advised not to wait for trouble, but to drive in our new station and let them look you over. "A stitch in time" is the old adage and it applies particularly regarding tires and batteries.

DUSK MAGIC

My drab house stands in a drab old street. But on rainy dusks in spring It drops its shell of the commonplace And becomes an enchanted thing,

And the way of its transformation
Is as simple as can be;
For I have a lad that is five years old,
And a little maid of three.

And stormy dusks when the thunder booms And crashes over the town, "I'll build you a Norman tower," he cries, "For the sky is falling down!"

So he builds her a Norman tower of blocks, Four-square, strong and high, To shelter her from the storm and night, The rain and the falling sky.

And she quakes with fear when gusts of rain 'Gainst the window panes are hurled; For he says the wind has gathered the streams And is driving them down the world!

But she will be safe in her Norman tower From windand raging storms; And she huddles close while he builds and talks, Peopling his tower with his dreams.

My drab house stands in a drab old street, But on rainy dusks in spring It drops its shell of the commonplace, And becomes an enchanted thing.

And the way of its transformation
Is as simple as can be;
For I have a lad that is five years old,
And a little maid of three.

-ZOE TIFFANY.

The Medical Aerald and Electro = Therapist The Kansas City Medical Index-Tancet An Independent Anothly Augustus

Vol. XXXIX.

JULY 15, 1920

No. 7



MORPHINISM IN PREGNANCY AND THE UNBORN*

S. GROVER BURNETT, Kansas City, Mo.

The therapeutic action of opium and its derivatives on the functions of gestation is well known. The restless, irritable, pregnant uterus, in rebellion against carrying its burden to full term, has become a common story in daily practice, when, under the narcotic influence, normal function was assumed and normal labor followed. Not only once but repeatedly has this recurred in the same woman under the same physician's care; and to the physician's chagrin, it has happened that a full term baby died on the second or third day without known cause after mastery over the threatened abortion.

But do women become pregnant after taking morphine over an addiction period and in addiction dose? The majority of them do not, but some of them do. Hundreds of babies are born in the United States of mothers addicted to narcotics, notwithstanding the Harrison act with its imposed penalties and its primary grab at the physician's pocket as a revenue measure.

We well know that morphine addiction establishes an artificial monopause in women and impotent incapacity in men. For this reason they become sterilized, the remark is often made, and do not bear children. As supporting this theory, a patient, addicted in her first pregnancy, went to full term and lost the baby through mistreatment on the third day. She never flowed and never became pregnant again in the next ten years though she wanted a child. Believing her addiction to be the trouble, she came to be treated for morphinism. She was taking eight grains daily. Four months after treatment she menstruated and experienced coitic craving which she had not experienced during her drug addiction.

A year later she gave birth to a healthy child, and at last report had three children, all well. She never returned to the drug.

On the other hand, women have borne children during the addiction period when the drug menopause was established, with no menstruation at any time during the addiction period. A case in point was a woman never flowing, bearing seven children, losing six of them by the third day because of mistreatment. When the seventh child was delivered, the seriousness of the mother's addiction was recognized and I was called. Cut off from the mother's placental blood supply, charged with the narcotic, the babe's narcotic supply to the blood current, previously from the mother, was now maintained by artificial administration to the point of keeping the little fellow comfortable till after the third day, when the mother's milk gave back what the cutting of the placental cord took from him. When the child was four months old, the mother and babe were both treated and relieved of the narcotic habit. After the babe was weaned, the mother's menstruation returned and later two seemingly normal children were born to her.

Thus clinical facts do not support the formed opinion of earlier writers that menstruation and ovulation are both always functionless through an artificially established menopause, suspending the menstrual function of the uterine mucosa and the ovary. It may be true as in the first clinical illustration given in the foregoing, but it is not true as to ovulation in the case of the woman bearing seven children with all manifestations of a drug menopause present. The clinical fact that so large a number of women addicts do not become pregnant may support the contention of the arrest of both ovulation and menstrual function; but we know that a narcotized uterine mucosa is out of function and apt to be unable to give a receptive gestation nidus to the ovum. This may account for the sterility. Also be it remembered that in the confirmed addicts, the mental poise of these women is against the preservation of the maternal instinct; that morally they are shaded from slight perversions in acts to full fledged criminal accomplishments and could not be expected to foster the delicate

^{*}Read before the Medical Society of the Missouri Valley at Des Moines, Iowa, Sept. 18, 1919.

and tender ties of motherhood. This psychology of morphinism should, fortunately, prevent conception in confirmed habituaes. This is a mind status that makes morphinists different from that of the normal person. The mental status is largely dependent on the millions of sensory end bulbs, the peripheral sentinals, in all membranes and cutaneous surfaces, receiving and carry impressions from the outer world to the brain. Under chronic narcotism, these sensory end bulb message carriers are narcotized. They do not receive external stimuli as normal impressions and carry them to the brain for normal mental assimilation. If these end bulbs do carry messages they are false, broken or imperfect messages with a false mental conception and output on the part of the individual, and therefore, morphinists are called liars of the worst type; yet they are mentally unable to appreciate the enormity of their moral sins. Again a morphinist does not take cold under any reasonable conditions. The reason is that the thermal end bulbs do not take up the messages of cold, therefore, do not carry them to the central nervous system to freeze out the central heat making capacity. They do not complain of cold as normal persons do. But when convalescing after treatment for morphinism, when otherwise comfortable, they chill easily because their sensory end bulbs are denarcotized and are for a time hyperaesthetic, over-active. This is why toothache, neuralgia and like discomforts are complained of in convalescence and especially the agonizing cramp pains of the limbs, coming on during treatment. and only mean one thing, namely, that the treatment or method of treatment is bad, carelessly given, or that the doctor could consistently acquire more information on the subject.

So with all the sensory end organs, protoplasmic organs, narcotized, paralyzed by molecular chemic changes, all refined, highly organized sensory functions must suffer. This means disruption of the anabolic and catabolic functions, explaining the internal toxic state, a secondary sequel, but the revolving axis of wordy words in short cuts to fame. As Henry Ward Beecher's viewpoint of the hepatic function was: "The seat of the devil, the liver."

With the nerve end organs of the uterin mucosa undergoing molecular chemic changes as a result of habit narcosis arrested menstruation should and does happen. And with this morbid state of the uterin cavity, though ovulation occurred regularly, physiological requirements of conception are so transgressed that conception is nearly as difficult as the taking of colds by confirmed addicts. From the number of addicts who do conceive in the absence of menstruation, the clinical indication is that ovulation is not arrested, at least not to the extent as indicated by earlier writers on the subject.

The care of the unborn in mothers addicted to morphine is of little comment in literature. Whether the mother shall be treated for morphinism while pregnant or after confinement has in my practice depended upon the age of the pregnancy and the history of an abortion tendency. Where the habit was formed in preventing abortion and the pregnancy advanced beyond the fifth month, I have advised conservative use of the drug till after confinement, carefully providing the babe with the drug till the mother's milk supplies its needs, and at a later period treating both mother and babe for morphinism. Without the abortion tendency I have, as a routine, given the pregnant woman the treatment up to the seventh month. After the seventh month of the pregnancy, I saw nothing to be gained by treatment at that time and have advised hands off till after delivery with the stringent precaution for the first three days in the babe's safety care.

An Oklahoma physician's wife was given morphine to control vomiting of pregnancy the first three months. The habit was formed, continued through the pregnancy, when a seemingly normal child was born. In about six hours the doctor relates, the babe showed restlessness, nervousness, increasing till death in convulsions in about seventy-two hours. The attending physician was not told of the addiction and it did not occur to the father, a physician, as the cause of the child's impending death till too late. The wife was treated for morphinism and remained well till her next pregnancy, three years later. Vomiting came early with this pregnancy and two subsequent pregnancies, three in all, taking the drug to the fifth month in each pregnancy and then came to be treated for morphinism. Following each treatment she went to full term. The children are now 9, 12 and 15 years of age and seem normal and the mother is free from morphine. On my advice further pregnancies were avoided.

A paper today on this subject seems almost antiquated as most remaining addicts are morphino-manias, mental defectives and borderline criminals, instead of simple morphinists, thanks to the Harrison law; but a recent case of a father and mother, both confirmed addicts, becoming proud parents of a child born a morphinist, modernizes the matter as a rarity again.

These morphinist babes can all be saved by simple, but technical treatment immediately instituted following their birth, otherwise they all die in two to three days. The mother's blood, narcotized, is the same in the child through the placental circulation. Severing the placental cord cuts off the child's narcotic supply and collapse and death must follow unless the emergency is met. Knowing the mother's 24 hours accustomed amount and how near her last dose was to the

severing of the cord, is a guide to the beginning of the babe's treatment. From the time of the mother's last dose, before the placental circulation was severed, to the time her accustomed next dose will indicate when the babe's circulation needs the narcotic, as the narcotic solution in the blood and the narcotic demand of the nervous system is the same as the mother's at this time. The mother's 24 hour dose is not a relative dose for the child, if she exceeds 8, 10 or 12 grains of morphine. Above that amount the proportion assimilated to influence the central nervous system and that excreted as extraneous matter is undetermined.

The child's craving will show in discomfort, restlessness and nervousness. While babes do not bear narcotics well, normally, neither do they bear habit narcotic collapse and they die quickly (36 to 72 hours) if the collapse is not prevented. If the mother is to nurse the child, camphorated tincture of opium, 15 to 20 drops, or plain tincture of opium, 1 drop two or three times in the first hour, graduating the dose and time of the dose till the child shows comfort. Narcotic sleep is to be avoided. If the child is kept comfortable, it will sleep naturally. Maintain this state till the mother's milk starts and then let the child nurse and get the narcotic from the mother's milk. In the meantime, the mother's drug dose should have been determined, not too small, not too large, and given at a definite, regular time. After two, three or four months, mother and babe should both be treated and relieved of the drug. If the babe is to not nurse, special care in regulating the required dose and interval of dose is necessary to keep the little nervous system in balance from the start. As soon as healthful progress will permit, very gradually but systematically, begin a reduction treatment to extend over a period that will not interfere with the comfort and well being of the child.

This all seems simple, and is simple, still it's a man's size job and needs the personal direction of the physician and even he may have to lose a case or two before he realizes it's not so much what he does, as it is how he does it.

Medicsbungy, 315 E. 10th St.

BLOOD CHEMISTRY AND ITS CLINICAL SIGNIFICANCE*

M. G. WOHL, M. D., Omaha, Neb.

Chemical analysis of the blood has attracted for many years the attention of both clinician and laboratory worker: however, the methods employed were so complicated and time consuming that they never became part of the clinician's armamentarium.

In order a laboratory test shall stay it must be simple, easily executed and prove of some aid to the practitioner, either in diagnosis, prognosis or in the management of his case. The advent of the modern methods of blood chemistry has met there prerequisites and there is no doubt that they will find a permanent place in practical medicine.

A great number of these tests have been used. It is the purpose of the present communication to select those that are most satisfactory for ordinary clinical work and to discuss their practical significance.

Sugar—It will be necessary to outline briefly our present conception of carbohydrate metabolism. The carbohydrates are chiefly absorbed as glucose, levulose and galactose. After digestion the carbohydrates find their way into the blood, where they are found normally about 0.1-.15 per cent. In a series of 18 normal individuals we found the blood sugar to vary from .12— 17 per cent. The sugar in the blood is found in a free state and not in a combination with the proteins, as believed heretofore. (1) When the sugar thus carried is brought to the liver the latter picks out the glucose, levulose and galactose and converts them into glycogen, which is stored in it. During fasting glucose is called upon and is more or less completely consumed.

Glycogen is converted into glucose in the liver during digestive rest when the liver is deprived more or less of its oxygen. Another source of sugar is the end product of proteins, amino acids, which become converted into glycogen.

When the level of sugar in the blood rises above normal, we speak of hyperglycaemia. The sugar in the blood is influenced by many factors. Thus we have 1. Physiological hyperglycaemia, such as alimentary-emotional disturbances and exposure to cold; 2. Pathological, as in conditions involving changes in the glands of internal secretions of pancreas (diabetes), certain hepatic diseases, cerebral injury, etc. (2)

Under such conditions hyperglycaemia usually spells glucosuria. This fact seems well recognized; however, glycosuria is not always the expression of hyperglycaemia.

As you know, the normal urine contains glucose less than 0.1 per cent. When the kidneys show a greater permeability for sugar, glucose appears in the urine without a true disturbance of carbohydrate metabolism. Cases of glycosuria due to increased renal permeability or so-called "renal diabetes" are rather uncommon. They are most often diagnosed as mild diabetes, for in the majority of cases the finding of sugar depends upon the examination of urine alone. Owing to improved methods of blood chemistry, we can differentiate these cases from true diabetes.

The renal threshold for glucose, which is usually about .17 per cent of concentration (by

^{*}Read before the Medical Society of the Missouri Valley at Des Moines, Iowa, Sept. 18, 1919.

that we mean that the average individual will begin to excrete sugar in the urine only when the blood sugar reaches above .17 per cent), is low in these cases and this can only be determined by chemical analysis of blood.

McLean (3), Meyrs and Bailey (4) have emphasied the fact that cases of diabetes associated with nephritis, or patients in coma may show very little sugar or no glycosuria, while the blood will reveal a marked hyperglycemia. It is through estimation of the blood sugar that valuable information may be obtained in these cases.

The determination of sugar in the blood, I believe, will never replace the time honored Fehling's test for sugar in the urine as a routine measure, but it will find its usefulness in special conditions just mentioned, as well as in the starvation treatment of diabetes. The object of this method as you well know, is to keep the patient free from hyperglycemia. However, in many cases, where there is a considerable glycosuria, the excretion of sugar in the urine continues long after the blood sugar has fallen below the level at which it first appeared, so that when sugar is first detected, e. g., when the blood sugar is .17 per cent, sugar may still be excreted after it dropped to .1 per cent (5). This point was impressed upon us by a recent case of diabetes.

Dr. L., dentist, 35 years of age, had diabetes for last two years. He came to our observation on November, 1918. His urine at this time contained 2.6 per cent sugar; blood .19 per cent. He was placed by his family doctor on the Allen treatment. During this time the blood sugar fell to the level of .11 per cent, yet the urine continued to show 1 per cent of sugar. At present he can tolerate 140 calories of sugar with a normal blood sugar, although urine is never free from sugar.

When diabetes is associated with nephritis. the output of sugar is diminished in the urine. In chronic nephritis, on the other hand, the sugar in the blood may be increased without the

appearance of sugar in the urine.

There are also cardio-renal cases, as was pointed out by Williams and Humphrey (6), that excrete sugar in the urine. The blood sugar may be at a normal level or higher. The blood sugar level, however, remains uninfluenced by carbohydrate restriction in the diet. Such cases are being subjected to rigorous diabetic treatment without the least influence upon blood sugar.

The principle of estimation of sugar in the blood depends upon the fact that a very small quantity of glucose produces with picric acid and sodium bicarbonate a red color. About 5 c.c. of blood is drawn into a test tube containing three drops of 20 per cent solution of potassium oxalate. To two c.c. of this we add 8 c.c. of water and .2 gms of picric acid and stir. The

yellow clear serum is filtered off and to 3 c.c. of this we add 1 c.c. of 20 per cent sodium carbonate and the solution is heated for 15 minutes and cooled, and estimation is made upon Hellige-Colorimeter.

Non-coagulable Nitrogenous (non-protein) Products of Blood-A routine examination of the urine may reveal the existence of a kidney lesion and at times the nature of the same. By far more important is the determination of the functional capacity of the kidney which by an ordinary chemical or microscopical urinalysis cannot be revealed. To illustrate this point let us take. for instance, diseases of the lower urinary tract. particularly the enlarged prostate, stone in the urether and stricture of urethra. We invariably find some destruction of parenchyma of the kidney and usually there is an accompanying infection; pyelitis, pyelonephritis, cystitis, the urine showing albumen and sometimes casts. How much information can we get from an ordinary urinalysis? The output of urine may be normal, the albumen may come from the pus or kidney and yet the patient be on the verge of functional failure. If operative procedure is considered, our aim should be to ascertain whether the kidney has sufficient reserve to meet the added load, made upon it by surgical interference (7).

In connection with this, an investigation by Thomas (8) is very interesting. He finds that the mortality from nephrectomy and prostatectomy in the hands of the general surgeon is 25.9 per cent and 22.5 per cent respectively, as contrasted with 7.7 per cent and 4.33 per cent in seven times the number of operations by eight of the world's most noted urologists. In other words, this means that in a large minority of such operations, from 75 to 80 per cent of deaths are avoidable, if the kidney function is ascertained before the operation. According to Rowntree (9) cases of low renal function should be put on drainage treatment and re-tested from time to time. When the functional ability of the kidney is improved, the surgical treatment is much more likely to be successful.

Or, take, for instance, nephritis of childhood. A child recovers from an acute attack of nephritis. The patient may carry little albumen and occasional casts for months. What is the prognosis in such a case? Can a routine urinanalysis tell us whether the child will ultimately recover, or the disease will advance and finally prove fatal in a few years? Since, as you know, many children may entirely recover after one or more years of albuminuria, while others develop Bright's disease and die within a few years. The estimation of the functional capacity of the kidney, plus the clinical side of the case, will aid us making a more intelligent prognosis, than a chemical and microscopical urinalysis alone

Among the modern methods employed for estimation of renal function, the various dyes, indigo-carmin, phenol-sulphophtalein, etc., have found a field of usefulness, the latter being particularly valuable in childhood. However, there are cases with distinct kidney lesion accompanied by hyperfunction and in these cases the phenal-sulphophalein is very misleading (10).

In estimating the renal function one ought to take into consideration the vital function of the kidney to maintain the equilibrium of protein metabolism, and if we can ascertain any deficiency of the kidney in removing waste nitrogenous products we have at our command the most accurate possible index of kidney function.

The index of waste nitrogenous products circulating in the blood is represented by urea nitrogen, uric acid creatin and creatinine. The normal amounts are as follows:

retained in deranged kidney. When uremia is approaching urea and creatinin are increased far in excess of the normal; the former reaching as high as 300 mgm. The estimation of blood urea would then be of particular value in cases of chronic nephritis.

While everything in these cases may seem to go on evenly on the surface, uremia may supervene. Frequent blood analysis may warn both patient and physician of an impending uremia attack.

Rowntree cites a case of a little boy, clinically a diabetes insipidus, with good prognosis. Blood analysis changed the diagnosis to secondary contracted kidney with impending uremia. This diagnosis was proven at autopsy in two weeks (11).

The determination of urea is also of value in

ADULTS		CHILDREN
25-35 mg. per 100 c.c	Total nonprotein nitrogen	. 20-34 mg. per 100 c.c.
12-18 mg. per 100 c.c	Urea nitrogen	. 12-15 mg. per 100 c.c.
0.8-2.5 mg. per 100 c.c	Uric acid	.0.6-2.5 mg. per 100 c.c.
0.8-2 mg. per 100 c.c	Creatinine	.0.58-3.44 per 100 c.c.
0.815% per 100 c.c	Sugar as glucose	.0.815 per 100 c.c.
0.65%	Chlorides as NaC1	.Phenolsulp. 75%
0.15%	Cholesterol	.Below 60 is abnormal

Urea is the principal end product of protein metabolism. Urea nitrogen in normal individnals constitutes about 50 per cent of the total nonprotein nitrogen of blood, and 85 per cent in the urine. It is well known that concentration of urea in the blood and its output is greater after excessive protein consumption. The body does not store excess of protein like fat and sugar except in very limited quantities. Instead of storing the excess, the nitrogen is split off from amino acids, converted into urea and excreted, while most of the carbonaceous part of the amino acid molecule is converted into glucose or fat and stored in that form. Urea Co. (NH2) 2 is formed partly from ammonia (carbonate) (NH4) 2 Co3, which is set free during digestion and absorption of protein food, and partly from amino acids such as leucine, glycocol and aspartic acid. The formation of urea probably takes place in every cell of the body, but its greater bulk is formed in the liver.

A decrease in the excretion of urea (normally about 30 gm. per 24 hours) may be the result of a small intake of protein. The amount of urine in such cases is diminished 300-500 c.c. per day, urea acting as a diuretic. The concentration of urea in the blood then is proportionately diminished. The elimination of urea may also be diminished as the result of changes in excretion as in kidney disease. In such cases, however, the concentration of urea in the blood is increased. Urea constitutes one of the earliest substances

checking up the results of drugs, diet in chronic nephritis.

Ambard Coefficient—The ratio between concentration of urea in the blood and its elimination in the urine has been extensively studied by Ambard and Weil (12), and is expressed by a coefficient which in healthy individuals is 0.080. In renal deficiency the coefficient rises.

McLean (13) has simplified Ambard's formula and places the normal to a coefficient of 100 with lower readings obtained in deficiency of kidney.

From our own, though limited, observations with the coefficient we find that the total non-protein nitrogen and urea of the blood, which are much easier to estimate, give equally valuable information. The principle of urea estimation depends upon conversion of urea into Ammonium carbonate by means of urease of the soy bean, and the determination of alkalinity before and after conversion by means of a standard acid and indicator (14).

Uric acid in the blood varies from 1 to 3 mgs. per 100 c.c. of blood. In lead poisoning, gout and nephritis it is increased.

Creatinine—Of far greater prognostic value is the estimation of creatinin in the blood. Creatinin is most readily eliminated of the three nitrogenous products: uric acid, urea and creatinin. Therefore, an appreciable retention of creatinin indicates a grave impairment in the functional condition of the kidney. The amount of crea-

tinin excreted is constant for each individual, unlike urea being independent upon protein in-

Creatinin is formed in all of the tissues from creatin. Creatin is found in the urine of boys up to seven years of age, and after this age it disappears. Girls continue to secrete creatin until puberty. It reappears in the urine of women at every menstrual period. In fasting creatinin reappears in the urine. In nephritis creatinin retention forms part of the general retention of nitrogenous substances in the blood. In eleven out of thirty nephritics studied by Myers and Loegh (15) they found a retention of 5 mgm. of creatinin per 100 c.c. of blood, and all eleven terminated fatally. From a clinical point of view they consider a case with a creatinin content between 3 to 5 mg. as having unfavorable prognosis, and those with over 5 mgms. as fatal.

CONCLUSIONS

The modern "microchemical" methods of blood analysis are practical and of value in clinical medicine.

2. The determination of sugar in the blood is necessary for differentiation of glycosurias.

3. The estimation of nonprotein nitrogenous products in the blood is of great aid in prognosis and management of renal cases.

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FEEDING DIFFICULTIES OF THE **BREAST FED INFANT***

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The choice of a title apparently trite should call for an explanation to those long experienced in the general practice of medicine. Looking over the records of the so-called "difficult" feeding cases observed in this clinic during the past four years, together with a survey of medical histories of children admitted for other reasons, it was found that a not inconsiderable number of babies were removed from the breast when, as a matter of fact, this might have been avoided had there been a better understanding of a few

basic principles. While nursing at the mother's breast is the "natural" method of infant feeding. and while it might be assumed that only in the exceptional case is difficulty encountered, nevertheless the facts are far from being concordant with theory.

One may divide the causes of difficulty encountered into the following groups:

- (1) Mechanical difficulties due to mother or child.
- (2) Qualitative and quantitative changes in breast milk.
- (3) Troubles arising from some peculiarity in the child's health or constitution.

In actual practice cases occurring in the first group are not the rule. Considerable abnormality of the nipple, deep fissure or breast abscess. especially the first if it be bilateral, make difficulties sometimes not easily overcome. A failure occurring in a mother with a bad nipple may be condoned. The treatment of fissures need not be discussed at this point, except to warn against the over use of alcohol in attempting to harden the nipple. I would prefer not to discuss the use of the nipple shield and the breast pump. A caked breast, in my opinion, at least, is no contraindication to nursing, for it is possible that the child's nursing may relieve the obstruction. In the case of breast abscess indications for cessation of nursing are made by the condition of the mother.

It is in the second group that the chief difficulties and those most likely to be unavoidable are encountered. The first peculiarity of secretion that should be mentioned very briefly because it is very rare, is so-called galactorrhoea, an anomaly of secretion characterized by an almost constant flow of a bluish watery milk. Children at such a breast never thrive until the trouble is corrected. Restriction of fluid, addition of milk to the diet, corrections of digestive errors in the mother, removal of nervous influences, may all be tried. Atropine has been suggested. Not much is known about this condition. The outlook is not good and weaning is usually necessary. Definite absence of milk secretion must be counted among the extreme rareties and is so uncommon that it is mentioned more for completeness sake.

It may be just as well to approach the difficulties of the second group from the angle of the consideration of the facts stated in the histories. It is the rule to find that breast milk "did not agree with the baby" and that as a result of this the baby was weaned.

Questioning of such mothers showed that for reasons which we will try to make clear later on, the baby suffered with real symptoms such as pain, distension, eructations, vomiting, bad and frequent stools. In addition, some of these children failed to gain. This symptom complex makes up what is often known as colic.

^{*}Read before the Medical Society of The Missouri Val-ley at Des Moines, Iowa, Sept. 18, 1919.

The correct estimation of the causes of the trouble, in other words, the diagnosis, should be made as follows: If there be satisfactory gain in weight one must assume a sufficiency in quantity of the milk. The fault is, in all probability, too frequent feeding or, less probably, too much milk given at a single nursing. Many physicians are prone to regard as a little beneath them the giving of time and attention to the details of the regulation of the baby's diet in the critical and early days and weeks of his life. This responsibility is too frequently left to the nurse or the mother, or if the directions are given, care is not taken to see that they are followed. I will grant you that this does not seem to be a very glorious activity, the concerning one's self with the daily routine of a normal baby, but to the thoughtful physician, with the proper sense of proportion it will be every bit as worth while as the dispensing of time and energy in attempting to correct damage done these infants by the omission. It is my custom to emphasize the fact that with the baby's birth, he becomes a member of a household and society with many privileges, to be sure, but with many responsibilities as well. Of these latter, the control of the gastric passion comes among the first, and in this he must be guided by the mother and the physician. The mother's breast is not a sedative or soporific. The emphasizing of the three or four hour intervals of nursing with only six feedings in twenty-four hours and none after 10 o'clock at night lays the foundation for the infant's welfare and perhaps his life.

A little intelligent effort expended in this direction is one of the highest forms of preventive medicine. The babies born in the University clinic, from the fourth day of life receive nothing but water after the 10 o'clock feeding, it is possible, practical and almost imperative to begin the regulation of the baby's feeding habits before the end of the first week of life.

The symptoms described in a previous paragraph make the colicky baby or the baby with indigestion. This may come from overfeeding.

One must take the trouble to question closely, give firm directions for the correction of the evil present and predict a day or so for convalescence and assure the mother that the trouble will then disappear.

One occasionally finds a mother whose breasts flow very generously and whose natural secretion is overly abundant. In a case of this type recently encountered, the mother held to the twenty minute nursing interval, which she had learned, in spite of the fact that the child was satisfied. The result was that there were no symptoms of indigestion other than a little regurgitation. The child, however, was about three pounds over weight at four months.

Besides the overfeeding which is merely due

to too much milk, we occasionally encounter a milk which is really too rich in fat. In a case under observation a few months ago the average fat content was 8 per cent. This finding was made during an attempt to find the cause of slight convulsions in an infant, and while it has been my experience that excessive fat feeding in especially very young infants may lead to convulsions, in this instance, the petit mal was probably a sequela of influenza. The evidences of overfeeding are marked vomiting, apathy and fatty or even rancid stools.

A word at this point as to the value of the breast milk examination may not be out of place. I do not hesitate to say that in the largest number of cases, the only constituent worth determining is the fat. Specimens to be examined should be taken at the end of nursing or better still, two should be taken, one before and one after, because of the fact that the fat content of the secretion, increases from the beginning to the end of nursing. Many cases come to us for the examination of breast milk, and in our experience few of the specimens have shown any abnormalities. Other causes for the nursing difficulty are usually present.

Overfeeding, however, does not commonly lead to weaning. Weaning usually follows in those cases in which there are symptoms of digestive trouble associated with a failure to gain. The common conclusion is that the milk does not "agree" with the baby. One can easily understand why the physician and the mother should be out of patience and suspicious of the breast milk. Breast milk is being secreted. The child has bad stools, abdominal pain and may vomit, and furthermore, it fails to gain. The error lies in the fact that they do not recognize a clinical entity which is deserving of much greater publicity. This is "underfeeding dyspepsia," a clinical entity emphasized especially by French pediatricians. I cannot tell you what the mechanism and the pathology of this trouble is, but I can assure you that it exists, for I have seen it quite commonly even in artificially fed infants. In the artificially fed infant an increase in diet is followed with a reduction in the number of stools to normal and a corresponding change in character. A diagnosis of mere underfeeding at the breast should, therefore, be made in those babies which fail to gain even if there are digestive disturbances. To determine quantitatively the deficiency requires the weighing of the baby before and after nursing. One case seen in the clinic about a year ago was especially instructive, and the record rather complete as both mother and baby stayed in the hospital. The baby was weighed after each nursing for about a week. The weight remained stationary. Computation of the caloric value of the food showed that it was just a little below the requirements of the child. Besides this case which illustrates the slightest degree of underfeeding, there may be still greater degrees which will be followed, if not treated, with actual marasmus, although it is not often that the difficulty is allowed to continue for a very long period of time. In addition to such underfeeding cases we occasionally encounter women whose milk is low in fat, while sufficient in quantity.

Before discussing methods which may be employed to stimulate secretion and while the question of this important and not sufficiently well known clinical entity, underfeeding dyspepsia is clear in our mind, a word should be said as to treatment. The child should not be weaned. Supplemental feedings of cow's milk, diluted, and sugar added, should be given. Even though this introduces a mathematical difficulty in that the physician cannot know how much breast milk is being secreted unless the child is weighed before and after each feeding, a procedure which I will venture he will not be able to employ in actual practice, and therefore may not know the deficit to be made up with the artificial food, yet it is the method of choice, because the results are usually better than those seen from complete weaning. The reason for this is that in a considerable number of instances it may be possible to re-stimulate the breast to further activity. We must know that breast milk secretion is inhibited very sharply through reflex causes, be they from the mind or be they organic. If the mother's mind is relieved by the rest obtained through the child's getting enough to eat when supplemental feedings are given, the secretion of the breast may be increased to the normal or thereabouts. Sometimes the addition of milk to the mother's diet, the correction of constipation, the taking of exercise, or what is very important and sometimes overlooked, of sufficient diversion, separation of the mother from the child a few hours so as to break in upon the constant worry especially encountered in the case of the first born, often works wonders. These rather homely facts, perhaps known to many, are repeated in the hope that they may be of service to some suffering infant. The proper psychotherapy in cases of nervous mothers and especially those in whom the milk secretion is slow in establishing itself will often give surprising results. Another reason for the use of the so-called "allaitement mixte" is that this type of combined feeding is less likely to lead to difficulty in the hands of the inexperienced than is an attempt at artificial feedig alone.

Many physicians, after weaning children who have the symptoms of underfeeding dyspepsia, forget that they have blamed the breast milk and assume that the digestion itself is weak, at least that is the only way that I can explain their persistence in giving mixtures of cow's milk

which are woefully inadequate in supplying the quantitative needs of the infant.

Another reason why breast milk should be given in this combination is that the child is more likely to receive sufficient vitamines.

The fact that we encounter so many women who have difficulty in secreting sufficient milk brings up some interesting points for discussion. Is there a lessening in the ability of mothers to nurse their babies or are there mothers who are poor milkers just as there are cows who give small quantities—scrubs, I believe they are called. Nothing is gained by theorizing on this point. I should, however, like to make a suggestion with regard to the possibility of a relationship between prenatal influences on milk secretion even though I have no absolute-definite information on the subject. I have been impressed of late with the large number of mothers who drink no milk during pregnancy. That this may result in an inferior offspring seems to me to be highly probable if animal experiments are to be relied on. Many mothers do not like milk, some cannot digest it and some fear that it will make them corpulent. A few canny obstetricians fear that it will make the child large and complicate delivery. In spite of all of these opinions, milk or food containing lime, the vitamines of vegetables and of animal oils are an imperative necessity and it seems to me highly probable that during the next few years literature will be available on the subject of the influence of maternal feeding during pregnancy. The relations of the ductless gland hormones to milk secretion also should come in for much more

Certain observers have used extract of placenta, and pituitrin and foreign proteins have been suggested. This matter is still in the experimental stage, however, and it is not possible at this time to make any recommendations for actual practice.

One observation that has surely been made by many present is that in certain mothers, suddenly growing stout after the baby's birth, the milk secretion has as strikingly diminished. This suggests an influence of the endocrine system.

We come finally to those difficulties which arise out of a peculiarity of the child. The first of these is colic. It should be remembered that both overfeeding and underfeeding dyspepsia simulate colic. If by careful diagnosis these two conditions can be corrected or ruled out, and the child gains normally and still has to torture the neighborhood with his gas pains, then we may be justified in making a diagnosis of colic. This condition is likely to occur in the neuropathic child; and if there does exist a definite clinical entity of this type, one must assume that there is an abnormal sensitiveness of the gastroenteric tract and a failure to endure a degree

of fermentation well borne by the normal child.

Only two words as to treatment. Sometimes the additon of cow's milk will help. I personally recommend the use of powdered casein given the baby in half teaspoonful doses in suspension two or three times a day before nursing. A discussion of colic would not be complete without a mention of the observations of an English clinician. He found that if the baby were put to the breast while asleep and the actual nursing commenced without the baby being aroused the agony of colic would be avoided. So enthusiastic was he over this procedure that he even gave his little baby patients chloral so as to be sure that they were in a stuporous state, before going to the breast. This is a procedure that will hardly recommend itself.

The child with chronic catarrh of the nose should come in for a few words. He is a common enough being, and with his catarrh produces a very typical picture. He is a baby who gains, has an occasional digestive disturbance and often passes stools containing mucus. Fever is not uncommon. The meticulous physician may be impelled to resort to weaning, and if he does so, will only have additional trouble for his pains. The important thing is to recognize the condition, the cause of the trouble, and reassure and calm the complaining mother.

I have occasionally found babies who once having tasted the bottle will not go to the breast, especially when the flow is none too free. A special device has suggested itself, namely, feeding the baby with a bottle covered with an imperforate nipple. This is prohibition with a vengeance: One may also put a bitter drug in the milk for the same purpose. The baby with eczema sometimes is weaned and even with good result. There is, however, no guaranteeing that the eruption will disappear. It is much better to try even with forlorn hope the omission of fat from the mother's diet.

In the brief space of time at my disposal it has been impossible to cover the whole field of breast feeding. There have been omitted such questions as prematurity, contraindications to nursing, the wet nurse, child with deformed mouth and palate, the influence of menstruation and food and drugs taken by the mother and many others. If, however, it has been made clear that complete weaning from the breast may be avoided in many instances through the recognition of underfeeding and its clinical manifestations together with the wider adoption of a correct feeding interval and the use of the combined methods of feeding, the paper will have more than accomplished its object.

In druken stupor, "dead drunk," give tincture of aconite, five drops in a teaspoonful of water. One dose is mostly sufficient.

LOCAL ANESTHESIA* RUSSELL E. STONE, M. D., F. A. C. S.

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Since the discovery of cocaine, local anesthesia has been used and stood the test of experience, so much so, that the best surgeons all over the world are using it more and more extensively, even the public are becoming more educated in surgical matters, and today they insist, and some even demand, that they be operated upon while conscious, and by an agent which has all the advantages of a general anesthetic and will not subject them to the disagreeable after effects such as nausea, distension, ether pneumonia, etc., especially the more serious postoperative risks such as pneumonia, dilatation of the stomach, shock and even death.

The coca plant, indigenous, of Peru and Bolivia, has been cultivated since pre-historic times, and has been prominent in the religious and political life of its people. This plant was regarded as a gift of God, which satisfied the hunger and gave renewed energy to the tired and weary, and caused the unfortunate to forget their sorrow.

Next in the development of modern surgery the aseptic treatment of wounds has been the possibility of operating without pain. This was accomplished first with cocaine. In the use of this product it was soon noted that it was not free from toxicity, and with a view of safeguarding the patient many drugs have been used such as eucain, holocain, stovain, tropacocain, and many others, until finally the drugs used generally because of their nontoxic and uniform anesthetic properties, I refer to novocain and apothesine.

Up until the supply of novocain was cut off by the recent war, it was my anesthetic of choice. When no other supplies were available, fortunately apothesine was brought to my attention, at which time I gave it a thorough and impartial trial and since then have used it quite extensively in my work. It has the distinct advantage of being sterilized and in spinal anesthesia I get better results when it is used than any other product. It is only in recent years that local anesthesia has been used extensively. This was on account of the toxicity of cocaine, but with the introduction of the nontoxic products considerable attention has been given to the subject and wonderful strides have been made in the technique from this form of anesthesia. Local anesthesia, excluding spinal anesthesia, may be placed under two heads. First—Local Infiltration Anesthesia. In this a dilute solution of the drug is employed, apothesine or novocain, and the whole area to be operated upon is infiltrated. Seceond—Regional Anesthesia. A stronger solution is employed in a small quantity which is

^{*}Read before the Arcadia Parish Medical Society, August, 1918.

introduced around a nerve trunk or a weak solution is injected into the veins that supply the part to be operated.

I shall merely enumerate most of the operative procedures in which local anesthesia is indicated in an attempt to describe the general technique of infiltration and venous anesthesia, with special reference to vaginal surgery and umbilical hernia. Among the operations that may be successfully performed by infiltration anesthesia are: Gastrotomy, colostomy, the removal of all tumors of the skin, all tumors of the skin and fascia, of the flat bones as the skull, etc., all forms of hernia, appendectomy, all operations upon the anus, penis, scrotum and external genitalia, abscesses, aspiration of the pleural cavity, rib resection, dressing of all wounds, and all operations on the head and neck.

Infiltration anesthesia is produced satisfactorily by the injection of a one-half of one per cent solution of apothesine or novocain with the addition of four to eight drops of adrenalin and chloride (1-1000) solution.

General Technique for Infiltration Anesthesia

Four or more points surrounding the area which is to be anesthetized or injected. This is accomplished by placing the point of the needle between the layers of the skin and forcing out the solution until a small blanched spot appears. These points must be connected by an injection which is made into the skin forming a wheal which must completely surround the area, for otherwise the injection is of no value. Anesthesia is produced by bringing the solution into direct contact with the nerve endings. If no wheal is produced it means that the solution has been injected into the subcutaneous tissues and has not come in contact with the nerve endings. To produce this wheal successfully one must use a long needle and push it forward between the lays of the skin and inject the solution as the point of the needle moves forward. The continuous injection does two things. First-It avoids putting too much of the solution into the blood-vessel should one be punctured. Second—The needle always passes through tissue that has been filled with fluid. The next step is to anesthetize the subcutaneous tissues. This is accomplished by the use of a long needle introduced at the same points that were used for the skin anesthesia.

The same method of procedure at this point is used, that is, the solution is injected as the needle moves forward in order that the needle may be in anesthetized tissue at all times. If deeper anesthesia is required, as in the removal of an atheroma of the fascia or periosteum, the same rule is followed except at a deeper level.

The following case is an example of infiltra-

tion technique, and demonstrates how much surgery can be done under local anesthesia with perfect results for the surgeon and complete comfort for the patient.

Mrs. C. was refused operation in two of the well-known northern clinics, as she was told that her age and high blood-pressure and corpulency, plus albumen and caste in urine, were contraindications to a general anesthetic. The following is a brief history of her case: Age 63, weight 215 pounds, very fat, blood-pressure 210. Umbilical hernia, duration 17 years which continued to increase in size until it had reached the size of a child's head. She was beginning to have symptoms of partial obstructions on arrival at New Orleans. In addition to this she had a complete uterine procidentia (third degree) and a complete cystocele. Her uterus and bladder had been outside of her body for eleven years. Her condition was such that she could not enjoy life in any form as her urine was constantly dribbling, etc.

Operative Procedure

An ellipse was infiltrated about the hernia at such a distance from the sac that it was easily accessible, in this case I made the ellipse much larger as I wanted to remove the fat, at which time six pounds were removed, one foot in one diameter and seven inches in the other with a thickness of four inches. The fatty layer was injected through the primary line of infiltration. The fascia about the ring was infiltrated. This gave complete anesthesia. The sac was then opened and adhesions of omentum and gut freed from the ring and from each other. The flaps were prepared for overlapping and any degree of imbrication was possible as there was no rigidity of the muscles or increased intra-abdominal pressure when the sutures were applied. The Mayo technique was used.

The patient made an uneventful recovery from the umbilical operation and two weeks later I did an anterior vaginal colporrhaphy by infiltration anesthesia, and at the same sitting a high amputation of the cervix was done, also a complete perineorrhaphy was performed. After a complete recovery from the second operation, three weeks later her abdomen was opened under local anesthesia and her uterus was brought out of the abdominal cavity, bisected and the endometrum removed and the peritoneum sutured around the uterus and each half of the uterus sutured between the fascia and muscle of the abdominal wall. Her recovery was uneventful and she returned to her home in North Dakota cured.

I wish to state here that apothesine was the anesthesia used on this patient in all operations, using one-half of one per cent solution.

I would like to say a word regarding Venous

Anesthesia. In 1908 Brier discovered a new way to bring the anesthetic in contact with the nerve substance. He injected novocain solution in an exposed subcutaneous vein in the extremity that had previously been rendered bloodless by a rubber bandage. His experiments have shown that the vein walls were extraordinarily permeable to watery fluids. The injected fluids therefore passed very quickly through the whole cross section of the extremity between ligating bandage and produced within the territory terminal anesthesia, but call this direct vein anesthesia, since the nerve trunks passed through this territory conduction anesthesia was produced in all parts of the extremity lying distal to the ligating bandage. He called this indirect vein anesthesia.

The technique for the vein anesthesia is as follows: After the extremity is surgically prepared, the limb is elevated, the blood vessels are rendered bloodless by a sterilized rubber bandage which is tightly wrapped, beginning at the toes or fingers as the case may be. At the upper limit of the expulsion bandage a second rubber bandage is applied tightly around the extremity. Now the expulsion bandage is unwrapped for a distance not less than one hand's breadth nor more than three from the compression bandage. and here a second ligating bandage is applied. One of the larger subcutaneous veins between the two compression bandages is now opened under infiltration anesthesia. A canula is introduced and attached to a 100 c.c. syringe with a rubber tube about eight inches long. The solution is forced into the vein and it takes considerable force to send the solution through the collateral branches of the veins in the ligated section of the limb. In the upper extremity 40 to 50 c.c. are injected, while in the lower extremity 70 to 100 c.c. are used. When the veins are necessarily out during the operation, they should be caught immediately. One must wait from 5 to 15 minutes for complete anesthesia. The anesthesia will remain as long as the upper compression bandage remains. The lower one may be removed at any time if it is in the way of the operator. For Venous Anesthesia 1-2 of 1 per cent apothesine or novocain solution may be used to obtain best results.

To obtain the best results from the use of apothesine and novocain the operator must approach his task imbued with the spirit of gentleness in the fullest measure. He must have an accurate knowledge of the anatomy of the region he is about to operate upon, and above all, he must have in his mind's eye the full scope of the required operation.

The surgeon must have suitable instruments kept in good condition. This is absolutely essential to success of local anesthesia. Dull

knives cause pressure on distant nerves and gives the patient discomfort at the outset when he is most opened to suggestions of doubt. Dull scissors pinch badly; working forceps pull unnecessarily upon the tissues; a dull and rusty needle and a leaky syringe will defeat the most expert operator. Promise your patient that you will not hurt him and try your best to keep your promise, for in the confidence in what a surgeon says accounts for a whole lot in local anesthesia, or to sum it up in a few words, the psychology of the patient is a great factor in computing the results obtained from local anesthesia.

Liggetts Bldg.

OCULAR OPERATIONS IN THE PRES-ENCE OF A PLUS WASSERMANN*

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The title of this paper was suggested to me recently by the following incident. I had sent a couple of patients to the University Hospital, one for an operation for senile cataract, and the other for an iridectomy to relieve a closed pupil and incipient glaucoma, secondary to an old iritis of uncertain origin. In the course of the routine examinations they found a plus 2 Wassermann in the man with the cataract and a plus 4 in the man who required the iridectomy. reporting this to me, the house physician asked if the presence of a plus Wassermann made any difference in the prognosis so far as the eye was concerned. As this had never occurred to me before, I had to admit that I did not know, and was rather ashamed of my ignorance. To be on the safe side, I put both men on vigorous antisyphilitic treatment with full doses of sodium saliculate, and after a few days operated. I was still dissatisfied with my lack of knowledge on the subject and inquired among my colleagues as to what effect the presence of syphilis might have in operations on the eye, and to my surprise, they were just as uncertain about it as I was, some admitting that they had never though anything about it. I then turned to the general surgeons who were just as uncertain as the oculists were. Likewise the urologists. I was able to get a little more light from my colleague, Dr. Potts. who had been watching the process from a nose and throat standpoint. He told me that while he had had no unfortunate experiences in operating on cases that later proved to be syphilitic, at the same time he felt that it was exceedingly important to carefully examine the history of all suspected cases and if a syphilitic history was found to first put the patient on vigorous anti-specific treatment before instituting operative procedures, even though the surgical lesion was not one of specific origin.

Naturally one would infer from the scarcity

^{*}Read before the Medical Society of the Missouri Valley at Des Moines, Iowa, Sept. 18, 1919.

of information on the subject, that the presence of syphilis has little or no influence on the prognosis so far as an operation is concerned, but is this true? It was only a very few years ago that a prominent German oculist made the assertion that, as far as he could see, inflammatory conditions of the accessory nasal sinuses had no effect whatever on the ocular structures. A man who would make such a statement now would be selfclassified as an ignoramus so far as his knowledge of ocular inflammation is concerned, and so I am presenting the subject, not with the idea of bringing any definite information, but with the hope that some of you may have more positive ideas in regard to this than I have been able to But if not, that we may consider the proposition during the next few months and if possible come to some definite conclusion as to whether or not the presence of syphilis has any harmful effect in our operative work.

In spite of the progress made in the last few vears in our knowledge of infections and their secondary influence upon the human organism, and the advance that has been made in combating these conditions, we still get results that are not up to what we had hoped for and in some of them we search in vain for the cause. It is true that a certain percentage can be assigned to lowered resistance, which in turn is an admission that the organism is suffering from some unexplained irritant or strain. Then there are the various focal infections and in spite of our utmost care, we occasionally overlook the one that is causing the trouble, but even so, are there not cases which apparently do not fall under any of the classifications? We have thought that a so-called latent syphilis was practically harmless, but can we depend on the truth of this deduction? Borden of Boston, writing in the Journal A. M. A., Oct. 31, 1914, is of the opinion that "latent syphilis is a particularly important matter, at least in nose and throat practice, inasmuch as operations in that field may rapidly change the latent disease into a very active one. To operate on a patient with latent syphilis without knowledge of its presence is a serious error and one which should be guarded against. He strongly believes that one has no moral or legal right to perform a destructive operation of any magnitude on the nose or throat until a Wassermann has been made." (Abstract, Practical Medicine Series, 1915, volume 3, page 300). He quotes Dr. Abner Post to the effect that a child with heredity syphilis may be operated for adenoids with very injurious results. Some cases of hereditary syphilis give the symptoms of obstructing adenoids where there are no adenoids present. In the discussion of Borden's paper, Barnhill mentions two cases which had been operated on in whom syphilis was not suspected. In one, the patient practically lost the entire nose, and in the other,

a tonsil operation, a previously latent syphilitic process was lighted up into a very destructive one with marked loss of the soft tissues of the pharynx. A careful study of the history and a careful Wassermann test would have avoided these grave results.

But again the objection may be raised that we do not hesitate to operate in the presence of latent tuberculosis, chronic appendicitis, chronic salpingitis, etc. This may be true, but may it not also be true that some of the delayed recoveries, post-operative adhesions, and the general nervous discomfort that occasionally follow operative procedures and which are so hard to explain are the result of these same infections? In other words, may we not be discounting the real influence of these conditions that we have supposed to be latent. Furthermore, syphilis is a most insidious condition, manifesting itself in unexpected ways and in previously uninvolved portions of the body. Martin (N. Y. Medical Journal, Vol. 103, page 409), advises that even though a surgical lesion be non-specific, if the Wassermann test be plus, to at least supplement the operative procedure with vigorous anti-specific treatment.

Now, to return to the field of the oculist. We have found that there are certain low grade inflammations about the eye, which, while not presenting a definite clinical picture of syphilis, improve on active anti-luetic treatment. Again, cases come to us with adhesions, occlusion of the pupil, etc., in which the patient may not suspect that he has ever had syphilis, but, on operating, the wound fails to heal quietly, and instead of the patient's benefiting by the operation, he may be no better or even worse. As we know that certain cases of specific interstitial keratitis are precipitated by traumatism, may it not be true that a syphilitic inflammation may be stirred up by the operative trauma?

In the cases mentioned above, as the cataract was of the ordinary senile type, we have no reason to think that the syphilis had any particular influence in its etiology, and I am glad to say that the result of the operation was entirely satisfactory. How much of this was due to the vigorous anti-specific treatment which was instituted, of course, I cannot say. In the man with the extensive synechia and secondary glaucoma, there can be little doubt but that this process was of specific origin, and in his case the healing was less prompt and there was more postoperative congestion than one would expect in the ordinary condition of this kind. In this case also, vigorous treatment was instituted and carried on during the entire healing process.

In conclusion, it would seem that it would be wise not only for the oculist, but for all other departments of surgery, to go into the subject of possible syphilis even more carefully than we have in the past, and if this is found to be present, either clinically or from the laboratory tests, to institute, along with our operative measures, vigorous anti-specific treatment even though the surgical lesion itself be not necessarily luetic in origin.

THE SLOWLY EMPTYING STOMACH* JOHN M. BELL, M. D., St. Joseph, Mo.

I have selected this title because I want to call attention to a common symptom rather than a diseased organ, for the stomach is not always primarily at fault.

The emptying time of the stomach varies within normal limits. The time limit of emptying has been placed by the American G. E. Soc. at six hours, and in the main, departure from this indicates some pathologic condition.

A most interesting subject, broad, far reaching in its possibilities, and a question calling for close investigation. Why does the stomach There are anomalous cases empty slowly? where motility is impaired for no particular reason, except an individual characteristic, like a slow heart, or a big head or short legs. In fact it may mean nothing, and like the conditions quoted, if there is an absence of symptoms, and it be found incidentally, the patient should not be alarmed. It may obtain as result of too rapid filling, involving somewhat of a shock to the organ. It may exist as a result of imperfect mastication, too many large food particles. It may arise from too much ice water, ice tea, again shocking the organ, paralyzing peristalsis. These etiological factors may create vomiting, may not.

The most common causes may be arranged under two general subdivisions, atony congenital, and atony acquired. Congenital atony is a very common condition. Children may have indigestion from childhood without any specific disease except atony, lack of muscular tone. The appetite is easily satisfied, if they over eat they vomit. The doctor is expected to give some medicine to at once correct the condition. member, atony in such cases, and remember, also, it takes as long to put muscle in the stomach wall as it does to put it on the biceps. These cases-enteroptotics-require outdoor exercise, physical culture, cold bathing, small meals, eaten slowly, light suppers, avoidance of an excess of animal food, abdominal massage, cultivation of outdoor sports within limit, not to be overdone. This condition may show itself in early life, but more often just after puberty, or when the burdens of life are assumed, hard study, social activities, after marriage. There is another classobserved in adult life-acquired atony. The first evidence of age may be intestinal or gastric flab-

loids, our muscular tone gives out first within the abdomen. This does not mean men old in years, but rather those who have over done themselves in inside business, sedentary life. It may show at 30 or 40. There is a very close connection between the tonicity of skeletal muscles and alimentary muscles. Atony is found associated with ptosis, in multipara, and in any abdominal condition involving rapid loss of fat. Acquired atony, like the congenital type, may be accompanied with ptosis, may not. If it is, an abdominal support must be worn. An x-ray picture, taken standing is necessary to get a clear view of the condition. Here again there is necessity of getting away from the debilitating influences of life, less business strain, small meals, more outside activity, longer hours of sleep. Where ptosis coexists such cases are kept in bed 12 or more hours out of 24 for a week or more. Abdominal supports are needed. Abdominal massage, cold spray over the abdomen, and cold needle baths are helpful. If the ptosis is marked the footposts of the bed are elevated 6 or 12 inches, so as to relieve the strain within the abdomen, and give ligaments a chance to contract.

I have never seen any benefit come from the various surgical procedures for the support of either stomach or colon. The vagaries of atony associated with ptosis are numerous and extreme.

The musculature may be so weak as to render vomiting impossible, so that toward the end of the day no relief is obtainable until the stomach tube is used, then sleep comes.

There is a rather frequent symptom complex of epigastric discomfit of which the most prominent feature is vomiting after supper, any time between supper and midnight, usually within an hour or two. The first meal causes no concern, the second, noon meal, may occasion just a little discomfort, the third is followed by distinct sense of weight and within an hour or two comes up, and a sense of comfort and ease follows. In these cases there is atony, and dilatation at the pyloric antrum and hyperchlorhydria-a precursor of some real pathology. The stomach is just not equal to three tasks. Two it will perform without rebelling. These cases occur among indoor workers, in whom a general asthenia gives expression through the stomach. It calls for tonic routine, more out door hours, less business strain, two meals—at 9 a. m. and at 4 p. m.—cold abdominal douches, slowly eaten meals with deliberation and pleasant environment. Another symptom complex occurs with persistent vomiting of a duodenal type, suggestive of cholangitis, coming in spells at intervals of a few days to few weeks, associated with depression and pain in upper abdomen, but not so severe as in choleliathis. They are met with in those of enteroptotic type, with atony and ptosis, in which packing of the colon, specially the cecum, aggra-

^{*}Read before the Medical Society of the Missouri Valley at Des Moines, Iowa, Sept. 18, 1919.

vates the ptosis, until some kinking takes place along the duodenum beyond the ampulla of Vater, whereby the duodenal contents are arrested in their onward course and are regurigitated. If such cases are kept in bed the vomiting subsides. They must be kept there until an abdominal support can be fitted to raise the abdominal viscera, then the spells cease. Among the typical enteroptotic specially after the 18th or 20th year when they begin to assume the burdens of life, there is a persistent slowing down of motility, in well marked cases of cow horn stomach or canalization as Mayo calls it. The fundus falls below the pyloric antrum and there is inability of the feeble peristaltic wave to elevate the contents so as to completely evacuate the stomach. The organ is never entirely empty while in the upright position. Such a patient must be put to bed, fed in small meals of soft carbohydrates, pass much time on the right side and have daily abdominal massage. It is well to use the tube at night to completely empty the organ and give it rest over night.

Atony with its dyspeptic symptoms and its chronicity is a condition very often overlooked by the profession, yet it is the most common of all gastric shortcomings. From its association with ptosis and the bilious vomiting which characterizes it, it is frequently diagnosed as gall bladder pathology, or pyloric stenosis. It enters into the complexity of a number of obscure abdominal cases, so much so that many a surprise is forthcoming in the way such cases clear up after the atony is disposed of by rest, abdominal support and an appropriate diet.

The object of this paper is not to attempt to unfold any new philosophy regarding atony, but to call attention to its frequency, its chronicity when overlooked, the happy results of appropriate treatment and a plea for consideration before attempting surgery when the pylorus and gall bladder are the focus of attention. I admit the line of demarkation is not always sharp between atony and a pathologic pylorus or gall bladder or appendix, or a neurosis, but a close study of cases will reveal more pure atony than is admitted by most of us.

TREATMENT OF SPINAL CURVATURE*

H. WINNETT ORR, M. D., Lincoln.

The wave of interest which swept over this country in 1912, with the introduction of the Abbott method, regarding the treatment of scoliosis seems to have receded, leaving the treatment of this condition too nearly where it was before. There is a very modern suggestion that some of these cases may be treated surgically, and that results may be obtained for them by bone

transplant or by fusion of the vertebra in a corrected position in some other way.

A special committee, appointed by the American Orthopedic Association in 1915, consisting of Drs. Freiberg, Silver and Osgood, made a careful study of methods of treatment in scoliosis. They came to the conclusion that the Abbott method was distinctly more efficient than other methods.

The treatment of scoliosis in general has been a source of reproach, not only to surgeons and physicians generally, but even to orthopedic surgeons who have devoted years of study and practice to this special condition.

Until the introduction of the Abbott method, only a few of the most painstaking and thorough orthopedic surgeons were securing results in the treatment of scoliosis. Lovett, Freiberg and a few others treated scoliosis with a measure of success. By their teaching they influenced a certain number of others so that something was being done in the correction of the milder cases and especially in the prevention of curvature of the spine. In the moderately severe and the severe structural cases, however, but little encouragement was given for the patients to undertake treatment and such treatment as was undertaken, by means of plaster jackets applied in suspension or in recumbency or by the wearing of braces, scarcely even brought relief to the disturbances of function from which such patients suffered. Occasionally, a series of plaster jackets applied to the patient in suspension or with the spine straight or hyperextended would succeed in altering the outlines of the trunk into something approaching straight lines. In such cases, however, the improvement in appearance was usually secured at the expense of greater real spine deformity than had existed previously. At the end of jacket or brace treatment the patient often assumed a worse attitude than had existed at first.

Abbott's proposal was that correction of rotary lateral curvature or scoliosis must depend upon a rotation of the affected vertebrae back through the arc that they describe in developing the deformity, that this rotation could only be accomplished by the use of the ribs as levers, with the shoulders and pelvis fixed and with the spine in flexion. This gave us a new principle in the treatment of this condition.

After a number of years of experience with this method and after having treated upwards of one hundred patients by the Abbott method, a number of whom I had treated previously by other methods, I am convinced that the Abbott principle is the only sound one upon which to base the treatment of scoliosis today. It is certainly true that the earlier dreams of Abbott for the success of his method have not been realized either by Abbott himself or by those who have

^{*}Read before the Medical Society of the Missouri Valley at Des Moines, Iowa, Sept. 18, 1919.

employed his method. It is equally true, however, that a considerable number of patients have been cured; a larger number have been measurably relieved from their deformities and many others who could not be cured entirely or whose deformities could not be corrected have been sufficiently improved both in appearance and in health by the treatment, so that the Abbott principle and the Abbott method have been eminently justified.

One becomes convinced of the soundness of Abbott's method upon the appliction of the first successful jacket. It is true that the application of the Abbott plaster jacket is a somewhat laborious proceeding. In my own work, however, I have found it feasible to simplify the Abbott technique so that a jacket may be applied quite easily in from twenty to thirty minutes. Instead of depending upon the insertion of new felt pads and upon the shifting of the points of pressure in the same jacket to the same extent as that to which Abbott was accustomed, I have found it, in my own work, more satisfactory and more efficient to accomplish correction largely at the time of applying the jacket and to change jackets frequently; as often sometimes, as every week or ten days. This has several effects. In the first place, the patient and the patient's friends are able to see the rapid improvement in the contour of the trunk and ofttimes in the position of the spine. Second, tender points of pressure are more easily relieved by the application of a new jacket than by the shifting of pads over areas that cannot be thoroughly inspected. Third, the patient may at intervals of a week or ten days be given a twenty-four hour of forty-eight hour rest in bed and the application of the next corrective jacket actually becomes more successful Fourth, the patient's general condition improves.

It is important to make photograph or x-ray records of the patient's original condition and of his later stages. It is essential that corrective treatment or at least maintenance of correction secured be persevered in during the patient's growing period.

Full correction, if accomplished, must be maintained for a sufficient length of time so that relapse will not occur. If full correction cannot be obtained a jacket, brace or splint will be required for a very long time.

Anatomical correction can only be hoped for in young patients or those with some spine flexibility remaining. Improvement in contour, chest capacity and general health may be anticipated, however, for any except the most extreme cases if proper methods of correction are applied gradually and faithfully carried out.

Hospital Closed—It is announced that U. S. General Hospital No. 28, Fort Sheridan, Ill., has been ordered closed October 1.

LESIONS OF THE SACRO-ILIAC JOINT* JAMES E. M. THOMSON, A. B., M. D., Lincoln, Neb.

The sacro-iliac joint is regarded by most anatomists as amphiarthroidal or diathroidal. It is very closely analogous to the vertebral articulations in movement and structure, in that the large articulating surfaces of the ilium and sacrum (composed of spongy bone covered with a thin layer of hyaline cartilage) embrace snugly a very small spnocial cavity, and are bound together by a series of strong ligaments. Anteriorally, the more frail anterior sacro-iliac ligament firmly unites the joint; posteriorly, the very strong, great sacro-iliac ligament gives strong attachments; and the accessory ligaments, from neighboring skeletal structures, aid in maintaining this articulation.

The joint movement is quite limited, but it plays an important part in the hyperextension. hyperflexion, lateral bending and rotating of the trunk on the pelvis. The normal pelvis tips forward at an angle of 45 to 60 degrees, which places the ligaments of the sacro-iliac joints at a disadvantage when subjected to the abuse of abnormal twists, jars, postures, etc.

Lesions of the sacro-iliac joint may be considered broadly as (1) infective; (2- static: (3) traumatic.

Of the infective variety, the type that is seen least and of which most is written is tuberculosis of the sacro-iliac joint.

This chronic affection was first described by Boyer as early as 1814, and closely associated with the pathology and clinical description of the disorder are the names of Velpeau, Larrey, Longur, Erichsen, Delens, L. A. Sayre; and in later years, Weller Van Hook, Tobby, Lannelongue, Young, Ridlon, Jones, et cetera. It occurs seldom in the very young or very old, the greatest prevalence, according to Van Hook, being between the ages of 15 and 35. It shows also a prevalence among those subjected by occupation to constant jars to the trunk and pelvis, such as cavalrymen, cow punchers, farmers, truck drivers, and the like.

The process is usually unilateral, and may begin in either bone—more often in the auricular facet of the ilium or the anterior aspect of the sacrum, generally excavating and forming a mass of tuberculous tissue.

The most formidable aspect that abscess formation when present, may take is to become intrapelvic by burrowing under the anterior ligament into the pelvis, complicating the abdominal viscera by rupture or metastasis, causing tubercular peritonitis. It may, however, force its way from the joint through the posterior ligament and become superficial or extrapelvic, with less danger to life.

^{*}Read before the Johnson County (Nebraska) Medical Society.

The symptoms are those of pain in the sacroiliac joint, either radiating upward to the lumbar region or downward to thigh and knee, following the course of the sciatic nerve. Any unusualy posture may be distressing and cause spasm. Rectal examination is all important, as roughening, swelling and pain in the region may be demonstrated. External swelling may also be present. Erichsen's signs is by some considered almost pathognomonic. It consists of pressure of the ilia together, followed by expression of severe pain. Lameness is noted in the afternoon, with short, careful steps; tilting of the pelvis, and apparent change of length of one extremity. Afternoon temperature is always a factor.

Diagnosis must be made from other disorders of the sacro-iliac joint, the neighboring joints, bones and soft tissue. Roentgen examination is of tremendous aid in the diagnosis.

The treatment in general is that of tuberculosis of other parts, with the employment of fixation of the articulation by means of splints, extensions, or double plaster-of-paris spica—the latter being by far the most satisfactory method of dealing with the process. The duration of fixation will be dependent on the absence of abscess and the disappearance of all other symptoms. Later, as improvement is marked, a pelvic and back truss or brace of one of the varieties described by Osgood and Marshall, or a removable pelvic cast, may be used. The abscess when present (if extra-pelvic and progressive) may be aspirated if extreme care is exercised, but only by one experienced in this art. Radical operative measures are to be avoided during abscess stage, and only long after the destructive process has been arrested should operative ankylosis be attempted.

The duration of active treatment cannot be estimated but must be governed by continued absence of findings, and a brace should be worn for years after the abatement of symptoms.

Other arthritic processes are known to this joint, though generally of obscure etiology except when the removal of suspected focus of infection automatically cures the process in the joint. They may be streptococcic, staphylococcic, gonococcic, or even luetic in origin.

The acute arthritic or rheumatic type may affect one or both joints and is seldom attributed to injury. It occurs more often in young women than in men, with rather acute onset, perhaps following a "cold" or "fever" of unknown origin, or some "menstrual disorder."

The symptoms are those of pain in the region of the sacro-iliac joint, radiating to and through the region of the great trochanter, extending up along the lumbar spine and down the anterior thigh. There may be slight fullness on the affected side, and possibly redness, increase of

temperature. There is always tenderness and marked rigidity of the musculature covering this region. Rectal examination is generally negative except for tenderness. Pressing the ilia together may cause pain, and the great trochanter on the side involved may also be tender. Generally there is a constant increase in temperature. Roentgen examinations will reveal the joint passing through one of the various stages of arthritis.

Thorough physical examination, as a rule, will reveal infected foci. The suspected focus should be removed, salicylates used, and further medical therapy employed as may appear necessary for the general health of the patient.

The treatment of the joint constitutes absolute rest, strapping with adhesive, and plaster cast (either pelvic or double spica); later, ambulatory steel brace or removable pelvic cast. This treatment generally covers a period of from six weeks to three months, according to the extent of the process and proper management of the condition, and it is my belief that a brace should be worn for six months after all evidence of active process has been relieved. Operative interference is rarely necessary except when suppuration calls for the drainage and later removal of destroyed tissue products; or when it is necessary, under anesthesia, to manipulate in order to break up adhesions and restore retracted muscles to their normal tension.

The latter operation consists of extreme flexion of the thigh on the abdomen with the knee extended, while the patient is under profound anesthesia. Relaxation and extension of the posterior muscles can be attained in this manner.

The history, compliment fixation tests and roentgen findings are a most valuable aid in the diagnosis when spirocheta polida and gonococci are factors. The treatment of the joint itself is the same as for other infections.

The statis type of sacro-iliac disorder is generally due to an asymmetry on the part of some one or more of the skeletal elements, with referred pain to sacro-iliac joint. When this is corrected the symptoms are relieved. The etiology may be congenital or acquired.

The cases of congenital asymmetry may be explained by a congenital hemiplegia with faulty development of one lower extremity, or congenital dislocation of hip. Among the acquired causes are nerve lesion, unilateral flat-foot, coxa valga or vera, genu valgum, and disease or deformity of the spine; also the shortening following fracture of lower extremity. The relief of the symptoms on correction of the deformity rules out actual changes of the sacro-iliac joint.

Roentgen examination is always of value in determining the deformity and showing absence of sacro-iliac disease.

Injuries of the sacro-iliac joint may occur pri-

marily or as a complication of other trauma. These may be fracture, subluxation, relaxation, and strain (acute and chronic). According to R. B. Cofield and others of vast experience, fracture, subluxation or relaxation of the sacro-iliac joint occur only as the result of severe crushing injuries except in the temporary relaxation during the later stages of pregnancy, which after childbirth is entirely relieved. However, I recall two cases of women who, three years after the birth of their first and only child, are free from symptoms only when constantly wearing pelvic support; and both of whom, when last examined by roentgenograms, still show marked separation of the sacro-iliac joint on the side affected.

The treatment of severe crushing injuries with sacro-iliac complications is reduction of the deformity if necessary, absolute rest and fixation of parts, plaster-of-paris double spica being the manner of election, with the usual care of fracture or similar injury of any other joint.

True sprains of the sacro-iliac joint (which comprise the greater portion of back injuries) are similar to sprains of other joints. They consist of trauma and tearing of the ligaments, therefore should be dealt with in a similar manner. They may be considered as acute or chronic, and are caused by sudden and severe jerks, twists and strains of the trunk whereby the ligaments of the sacro-iliac joint are subjected to unusual stress. These occur as the result of falling, jumping, turning, lifting, bending, etc. The symptoms are generally acute. The pain may be neuralgic or of a sharp cutting nature, often referred to the tract of the sciatic nerve. Swelling and rigidity develop, in extent depending on the amount of injury. A flat appearance may be given to the lumbo-sacral region (flat-back), due to the tilting backwards of the superior portion of the sacrum by the contraction and spasm of the muscles in that region. This is more marked on the side injured, unless both sides are affected.

Bending forward or backward or to the side will exaggerate the pain, and motion is limited to a certain extent on the affected side. The patient has difficulty in maintaining the upright position. While walking, great care is taken in stepping not to allow jar of the joint.

Recurrent and continued trauma causes the condition to become chronic, often existing over a period of years, with but slight continuity of severe pain, and repetition of acute symptoms whenever unusual strain is brought to bear. J. O. Wallace attributes the so-called hollow back (in which the superior border of the sacrum tips inward or forward) to a loss of tone of the back muscles. This condition, however, is the rarer of the two types. Roentgen examination is negative

The treatment in the acute cases consists of rest in bed, with pillows under pelvis and thighs

when impossible for the patient to rest flat on the back; and adhesive straps completely embracing the pelvis, tightly drawn, starting as low as possible and extending as high as the costal margin, employed for from one to four weeks. Where adhesive proves irritating to the skin, a light plaster cast applied around the pelvis will accomplish the purpose and relieve the symptoms.

In the chronic cases, treatment in bed should be followed by a brace worn from three to six months, with perhaps stretching of the retracted posterior muscles under anesthesia. In case the injury is very mild, mere strapping may be sufficient and the patient possibly can continue his duties.

Summary

1. The anatomy and function of the pelvis is such as to place it at a disadvantage when subjected to the abuse of unusual twists, jars and postures.

2. Lesions of the sacro-iliac joint are in origin (a) infective; (b) static; (c) traumatic.

- 3. (a) Of those of the infective origin, tuberculosis is the most grave, and necessitates a careful diagnosis, the salient points of which are as follows. Prevalent age between 15 and 35; men more often affected whose occupations necessitate constant jar to pelvis. Process usually unilateral; rectal and roentgen examination important. Most dangerous complication, abscess. Treatment; Fixation; absolute rest.
- (b) Acute arthritic type, occur more often in young women, seldom attributed to injury, often follows "colds," "fever," and menstrual disorders; affects one or both joints. Symptoms are: Pain and tenderness in sacro-iliac region, trochanter, lumbar spine and thigh; evidence of inflammation and constant increase of temperature; roentgen evidence of arthritis. Thorough physical examination all-important, with eradication of suspected focus of infection. Medical treatment, as well as rest to the joint, is essential.
- (c) Other specific infective processes are dealt with as the etiology may indicate, with the usual fixation of the joint.
- 4. The static type is not a true lesion of the sacro-iliac joint, as it is due to deformity of some neighboring skeletal elements causing an asymmetry and abnormal function of the joint. Correction of the deformity relieves the symptoms.
- 5. The traumatic type embraces fractures, subluxations and relaxations which are never seen except after very severe crushing injuries, and during pregnancy when only temporary; also strains and sprains of the sacro-iliac joint, which are by far the commonest of back injuries. They are similar to sprains of other joints, and should be dealt with as such.

The treatment is always fixation, the manner depending on the amount of injury.

Continuing "The Medical Fortnightly and Laboratory News."

The Medical Herald

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Vol. XXXIX

JULY 15, 1920

No. 7



Advance in Price—Our readers will please bear in mind that the subscription price of the Herald will be advanced to \$2.00 on January 1, 1921. Subscriptions will be received at the one dollar rate, for any number of years, up to December 31.

Dentistry at State Hospital No. 2

Dr. Porter Williams, superintendent, is deserving of great credit for the work now going at State Hospital No. 2 along dental lines. Several St. Joseph dentists are devoting time gratuitously in correcting the teeth of the patients. As a result many cases who, before, had been unruly are now well behaved and quiet. Many cases of ear disease and eye trouble have disappeared. Others are eating better and are improving in nutrition. The general atmosphere of the institution shows the difference, beyond the fact of there being fewer infirmary cases. Similar results were reported at the New Orleans meeting after a general overhauling by gastro enterologists in a Georgia insane hospital. Just how far insanity as a distinct disease entity is influenced by bad teeth or faulty digestive tract, is an open question. The element of reflected irritation no doubt adds to the severity of the patient's incapacity. Dr. Williams is to be congratulated upon the result of dental inspection.

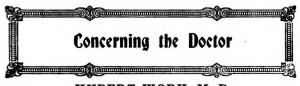
J. M. B.

Smoking After Meals

Admitting that the fragrant weed soothes or stimulates according to the psychology of the individual, there are times when it were well to avoid it. Men beyond their third decade of life would do well to break away from that growing custom of smoking after meals, and permit at least one hour to pass after eating before indulging. While it may soothe the nerves, it irritates the heart and increases tension. work of the heart is distinctly increased after a meal and the tension increased. If coffee has been a part of the meal this adds to the strain. since it paralyzes the inhibitory mechanism, and permits the accelerator to have full swing. Recall the large number of apoplexy fatalities which occur after a hearty meal. If now the tobacco be added the accelerator is still further stimulated and the heart has a burden which it may find difficult to carry. The high nerve tension of American life has for years been telling in the mortality tables regarding cardio-vascular deaths or break downs. It were well if we could remember that smoking after meals is one factor which is increasing this fatality.

Free Clinics Established — Because of the enormous number of persons reported by physicians as being infected with social diseases the United States Public Health Service has established a system of clinics in the most populous centers of the state to treat infected persons. It is the purpose of the service to see that every infected person in the state is treated until rendered non-infectious or cured. This is a large undertaking, but it can be done. Free clinics have been established at St. Louis, Kansas City. Joplin, Springfield and Jefferson City. Others will be opened as the work progresses.

Motor Aphasia—This distressing trouble is characterized by an inability to talk coherently or veraciously because of a motor. The victim will break into any conversation at any time or place with boastful remarks regarding hill climbing, tire mileage, upkeep, miles per gallon, and the like; or, if it be a weeping case, the substance of his talk will be blowouts, punctures, skids, stripped gears, or faulty ignition. The cases should be carefully segregated, for association with other sufferers tends to aggravate the complaint. A special recurrent form of the disease develops at the beginning of each month, when the patient finds it especially difficult to hold conversation with tradesmen.—Judge



HUBERT WORK, M. D.

The election of Dr. Hubert Work, Pueblo, Colo., as president of the American Medical Association, brings to that office a man especially fitted by training and experience for the efficient discharge of the important and urgent problems

to the provost marshal general. He has been a member of the House of Delegates of the American Medical Association since 1904, in which body he has held the office of speaker since 1916. Dr. Work's career has been marked by a high order of public service. His equipment and parliamentary experience especially fit him for the post to which he has been called by the profession. Nor have his activities been confined to medical matters. He is one of the few physicians in the country who have achieved political distinction. His candidacy for the United States



HUBERT WORK, M. D.
President-Elect American Medical Association

that confront the Association at the present time. Dr. Work was born near Marion, Pa., July 3, 1860. He graduated from Indiana, Pennsylvania and California state normal schools. He received his degree in medicine from the University of Pennsylvania in 1885. He has served as physician in charge of Woodcraft Hospital. As Colonel in the Medical Reserve Corps he was adviser

Senate was defeated by only a small majority, and for several years he has served his state as a member of the Republican National Committee. His war service has been mentioned. Under his official direction the Association cannot fail to be marked by progress and increased cooperation. (We are indebted to Modern Medicine for the excellent engraving of Dr. Work.)—Ed.



"Our Unseen Guest"—There are many surprises in store for the person who tackles psychic research for the first time. Perhaps the most startling of them all is the discovery that the people who are interested in spiritualism are not necessarily "old fogies" and people who are disappointed in life, but young, healthy folks, abundantly alive, and tackling the new science joyously as a new sphere of intellectual conquest. One feels at the outset that he would like to know Joan and Darby, the pleasant young couple whose adventures in spirit communication are set down in the pages of "Our Unseen Guest," published by the Harpers. In the first place, they do not take themselves too seriously, and that is in their favor. In the second place, they begin with a normal, healthy skepticism that makes the reader, whatever his previous convictions, be open-minded about their discoveries when they do simply and sincerely chronicle To these two young people—their identity is not revealed—there came certain spirit communications from a slain soldier who is named as Stephen. The adventure started with the discovery of an old ouija board, and when the ouija first began to record messages, each was inclined to believe that the other was fooling. When Joan and Darby learned that that was not the case, they took it up in real earnest. Clearer and clearer came the messages of Stephen, telling of his death and of conditions in the world beyond. But they still accepted the reality of this experience grudgingly-even after Stephen enjoined them to look for a certain war-book, and, discovering that book, they found his full and complete story set down in it. They tested him further, and Stephen, who had not possessed a limitless stock of patience in his physical existence, grumbled, but gave them the evidence they craved. Then came the long sessions when Stephen told his philosophy. Here, too, the sense of a live, vital human personality persists. The philosophy that comes from Stephen's voice in the other world is a saner, more common-sense system of thought than the doctrines of many a famous thinker. And, when the spirit world begins to send messages that really make sense. as is the case in "Our Unseen Guest," it is time to begin taking spiritualism seriously.

Bacilli From Human Tuberculosis — This painstaking work of Griffith gives valuable information about the source of tubercle bacilli in human tuberculosis. It has been recognized for a number of years that cow's milk, including

cream, butter, and cheese, are possible sources of human tuberculosis. We also know that a fairly large percentage of infections occur with bovine types of tubercle bacilli. Much confusion. however, has arisen from the fact that some investigators, evidently on insufficient evidence. have claimed that an overwhelming proportion of all varieties of tuberculosis is caused by the bovine type. This has been considered by them to be especially true in infants and young children. It is believed that to a great extent these opinions have been formed by mental association of milk diet and tuberculosis in children. These opinions are borne out to a certain extent by Griffith's results, but not to the degree usually stated. He analyzed 1,088 cases of tuberculosis, of which 20.7 per cent showed bovine infection. Further analysis, taken from his tables, gives the following:

Number		
of Cases	Age Groups	Bovine Infection
221	0 to 5 years	37.55 per cent
312	5 to 10 years	29.45 per cent
1501	0 to 16 years	14.66 per cent
384	6 and over	6.25 per cent

It is seen that 37.55 per cent in children in the first age group is the largest proportion of bovine infections found. The rapid falling off of this percentage even by the time ten years of age is reached, demonstrates that most cases of adult tuberculosis can not be attributed to the lighting up of a latent tuberculosis acquired in childhood from milk. This is further substantiated by the figures for bone and joint tuberculosis which approximate those for all forms of tuberculosis.

1. Griffith, A. Stanley: The Bacteriological Characteristics of Tubercele Bacilli from Different Kinds of Human Tuberculosis, Jour. of Path. and Bact., 1920, xxiii, 123. Modern Medicine.

-Modern Medicine.

Dr. J. M. Patterson announces that he has associated with him in partnership Dr. William W. Reed. Office 518 Bryant Building, Kansas City. Mo. Practice limited to diseases of the eye, ear. nose and throat.

Industrial accidents killed 3,400 persons and seriously injured 50,000 in the state of Pennsylvania in 1918, according to reports reaching the United States Public Health Service. Most of such accidents are preventable; many the result of carelessness. Safety First.

Artificial Lemon Juice—Huerre gives the analysis of lemon juice as follows: Citric acid, 7.50 c.c.; malic acid, 0.50; saccharose, 0.45; invert sugar, 2.00; potassium citrate, 1.00; calcium citrate, 1.00. In addition there are traces of iron and phosphorus. Water, of course, to make 100 parts. If a synthetic lemon juice cannot be substituted for the natural product it must be because something akin to vitamine is present in the latter.—La Presse Medicale.



DR. ADOLF ALT

Dr. Adolf Alt, 68 years old, 5614 Waterman avenue, St. Louis, professor emeritus of ophthmology in Washington University Medical School, died June 28th at his home from heart disease after an illness of two years. He had practiced in St. Louis for 40 years, in which period he was connected at various times with three medical colleges. He specialized in disease of the eye and ear. Shortly after his arrival here in 1880, he became an instructor in the old Beaumont Hospital Medical School, now the Marion-Sims College, which is the medical branch of St. Louis University. For several years he was identified with St. Louis University as a lecturer on ophtholmology, and from 1884 to 1918 was editor of the American Journal of Ophthalmology. Nine years ago he became associated with the Washington University Medical School as lecturer on histology of the eye and ear. In 1904 he was elected president of the Academy of Science and held that office for three years. He was one of the founders of the American Academy of Ophthalmology and Oto-Laryngology. He also was a member of the jury of medical awards at the Louisiana Purchase Exposition. He was made professor emeritus in Washington University Medical School in 1917. Dr. Alt received his M. D. degree at Heidelberg, and came to the United States in 1875. After serving for two years as instructor in the New York Ophthalmic and Aural Institute he went to Toronto, Ontario, where he became a member of the faculty of the College of Physicians and Surgeons, and later served as in-structor at Trinity Medical School. He is survived by his widow, Mrs. Helen B. Alt, and his son, Arnold D. Alt, a chemist. The funeral was held at 3 p. m., June 30, from a chapel at 3621 Olive street to Bellefontaine cemetery.

DR. FRED B. ABBOTT

The death of Dr. Fred B. Abbott, 30 years old, at the United States Army Hospital at Oteen, N. C., near Asheville, N. C., occurred as a result of lung trouble contracted from being gassed while in active service in the Toul sector in April, 1918. Dr. Fred B. Abbott was a St. Louisan and a son of Rev. Dr. B. A. Abbott, editor of the Christian Evangelist of St. Louis. After receiving highest honors in his class at Washington University, he enlisted early in the world war as a hospital physician with the first Harvard unit, to Boulogne, in the British service. After six months' service he returned home for a year and was assistant to the head physician at the Children's Hospital at St. Louis during that period. When Barnes Hospital Unit 21 started from St. Louis May 17, 1917, Dr. Abbott again volnteered. He served in hospital work at Rouen, France, for many months, but desired to give more perilous service, and went on to the front at the head of a medical corps. He and his companions were under gas for twenty-two hours, at Seicheprey, in April, 1918. He was obliged to go to the hospital, but he rested only a short time, and again went on to the front, serving actively until October. It was this final devotion, when he was unable to give such service, which caused his death later, as his weakened constitution could not withstand the exposure and hardships. After the armistice

Dr. Abbott came home. He was sent to New Mexico, but did not find his health. A change was taken to North Carolina.

MAJOR-GENERAL WM. C. GORGAS

Major-General Wm. C. Gorgas, former surgeongeneral of the U. S. Army, president of the A. M. A. in 1909, an international authority on sanitation, died



SURG.-GEN. W. C. GORGAS

July 4, at the Queen Alexandra hospital, London, following an attack of cerebral hemorrhage. Dr. Gorgas was born in Mobile, Ala., October 3, 1854.

DR. FINLEY ELLINGWOOD

Dr. Finley Ellingwood, Chicago, editor and author, died in Pasadena, Cal., June 29.

Diverticulosis is most common in the sigmoid, but it may occur elsewhere in the colon or in the rectum.

The Standard Oil Co. (New Jersey) has the largest merchant fleet flying the United States flag. With its world-wide connections and fleet of oil tankers this company is not restricted to one-or even several of the world's producing countries for raw ma-prials. With this choice of raw materials and unterials. surpassed manufacturing facilities, the expert chemists of the Nujol Laboratories of the Standard Oil Co. (New Jersey) have been able to produce absolutely pure liquid petroleum of every viscosity from a waterlike fluid to a jelly. The ability to produce that which was desired rather than the necessity of using that which was obtainable has made possible Nujol, a product for the treatment of constipation, which we believe to be the finest of its kind possible to produce in this or any other country up to the present time. The viscosity of Nujol was determined after exhaustive research and clinical test, and is in strict accord with the opinion of leading medical authorities. A series of booklets on Constipation and its sequellae has been prepared by the scientific and medical corps of the Standard Oil Co. (New Jersey), and these are being offered by the manufacturer, together with sample of the product.



ACUTE SYPHILITIC MENINGITIS

The term acute syphilitic meningitis should be applied especially to the acute meningeal accident of the secondary phase of the infection, sometimes preceding, but more frequently accompanying the cutaneous lesions of this period. Meningeal accidents which merit the name of acute syphilitic meningitis, may be met with in hereditary syphilis. The acute meningitis of the tertiary period do not appear to have a distinctly syphilitic nature; they seem to be rather meningeal accidents due to some very ordinary cause, grafted upon a chronic meningitis.

The pathology of the acute type is essentially a meningoangitis with hypersecretion of the cerebrospinal fluid. The trephonema has been found only occasionally in the cerebrospinal fluid excepting in cases of hereditary syphilis. Lumbar puncture is absolutely necessary to confirm the diagnosis, because it will show a considerable hypertension, the presence of a large amount of albumin, and a marked lymphocytosis with plasma cells. The meninges are permeable to potassium iodide and the cerebrospinal fluid will also give a positive Wassermann, although the reaction of the blood serum may be negative. The lymphocytosis persists for a long time after the disappearance of the meningeal symptoms.

The onset of the menigeal symptoms may be sudden without prodromes, but generally insomnia and headache will be complained of long before the meningitis develops. When fully developed, acute syphilitic meningitis offers a clinical picture recalling that of tuberculous meningitis, but it differs from the latter by the fact that the symptoms are less distinct, by the absence of evident disturbance of the pulse and respiration, by its irregular evolution in successive outbursts and remissions, and finally and more particularly by the data given by the Wasserman reaction. A comatose form has been observed, likewise localized types, at the convexity with convulsions and epilepsy, or basal with paralyses of the ocular muscles.

The immediate outcome is rarely fatal, but the ultimate prognosis must be reserved. In the first place, after the symptoms of meningitis have passed off, sequelae are frequently met with—absence of the reflexes, the beginnings of the Argyll-Robertson symptom, and lymphocytosis of the cerebrospinal fluid. Secondly, quite frequently an acute meningitis may pass into the chronic type and it is now generally believed tha chronic syphilitic meningitis is the causal factor of parasyphilitic accidents—tabes and general paresis—which considerably darkens the prognosis.

A prophylactic treatment, even when energetic, does not completely protect the syphilitic from meningeal accidents, whether mercury or one of the modern arsenical products is employed. Nevertheless a prophylactic treatment should be carried out and systematically followed in every syphilitic subject whose cerebrospinal fluid presents a persistent lymphocytosis, even in the absence of any meningeal symptoms. The curative treatment of acute syphilitic meningitis requires in the first place free and repeated withdrawal of the cerebrospinal fluid; secondly, an energetic mercurial treatment. The arsenical products have a much more rapid action, but not a few opservers advise against their use in nervous

accidents on account of neurotropism, although Ehrlich attributed the untoward symptoms in these cases to the syphilis itself and not to 606.—Med. Rec., Jan. 31, 1920.

NEW TECHNIC FOR THE RESTORATION OF THE URETHRA AT ONE OPERATION IN CASE OF EXTENSIVE HYPOSPADIAS

Nove-Jesserand (Journal d'Urologie) states that he and others have succeeded in completely restoring the urethra in cases of extensive hypopospalias and epispadias by means of tunnelization of the penis with a trocha, and lining the tunnel with a graft of skin. The author performed the operation forty times with complete restoration of the urethra in thirty-seven cases. These cases have now been under observation for from 18 months to 12 years, and micturition and erection are normal. The restored urethra does not resemble scar tissue in any way. but on the contrary it is thin and supple, resembling the lining of the external auditory canal. Hairs were observed at the external meatus in one or two cases. but they caused no inconvenience. Since the graft lacks erectile tissue, there is perhaps some interference with the ejection of the spermatic fluid in coitus, but otherwise the artificial urethra acts in all ways like the natural.

In adults the caliber of the artificial urethra is that of a No. 19 or 20 Charriere bougie; but in one case where the caliber corresponded to a No. 16 bougie there was no complication of the urinary tract above during 11 years in which the case was under observation.

The canal usually retains its original caliber, but sometimes, in young cases it develops and becomes larger with the growth of the organ. In four cases there was a stricture of the line of juncture of the artificial with the natural urethra. This was readily relieved by the usual procedure.

The operation consists of a preliminary suprapublic cystotomy. A longitudinal incision 6 or 8 centimeters in length is then made on the underside of the penis down to the facia, the orifice of the hypospadias being at the middle of the incision, the orifice of the hypospadias and the end of the urethra are then laid open for a distance of 1 centimeter. A trocar is thrust through the distal end of penis for its whole length out through the gland thus making a canal through the distal part of the penis.

The trocar is then withdrawn, and a sound with a forceplike end is thrust back through the artificial meatus.

A ribbon of skin, 3 or 4 centimeters wide and as long as required is wrapped about a sound, and held in place on the sound by 3 or 4 sutures. This is seized by the sound forceps, and pulled gently forward through the canal. The cylinder of skin around the sound constitutes the new urethra. It is sewn to the meatus at one end and to the short urethra at the other.

Minute details of the operation with full directions for every step will be found in the article. There are also many cuts and diagrams.

A diverticulitis giving but scant symptoms may nevertheless be the primary cause of an abscess of the liver.

Diverticulitis may much resemble, in clinical and physical signs and in roentbenopgraphic appearance, a carcinoma. The differential diagnosis can then be made by means of sigmoidoscopy and removal of a bit of tissue.



THE PITUITARY-By W. Blair Bell. William Wood and Company, New York. Price, \$5.00.

This work sums up what is known today of the morphology, physiology and surgical treatment of the pituitary, that small anatomic entity which promises so much in therapeutics when fully understood. A great deal of original work by the author from various standpoints is given—its relations to toxemias of pregnancy, its removal, its relation to the thyroid, to asthma, asthenia, shock, the interrelations to other hermonopoietic organs. Treatment is given much space. Many original drawings and illustrations add value to the work, which is very complete. The volume is well bound and in good readable print.

J. M. B.

DISEASES OF INFANTS AND CHILDREN—By Henry Dwight Chapin, A. M., M. D., Professor of Diseases of Children, New York Post-Graduate Medical School and Hospital, Ex-president of the American Pediatric Society, etc., and Godfrey Roger Pisek, M. D., Sc. D., Professor of Diseases of Children, University of Vermont, Medical College, etc. Fourth revised edition, with one hundred and eighty-two cuts and thirteen colored plates. William Wood and Company, New York. Price \$4.00.

It would be difficult to imagine a more complete, perfect work on diseases of children than that of Chapin and Pesek. Complete in scope, in detail, in illustrations, in diagnosis and treatment. This volume takes the new born infant, with all its shortcomings and abnormalities, all of which being fully discussed with diagrams, charts and cuts, both colored and in black and white and carries it throughout babyhood to school life. The work is conveniently divided into 17 sections, newly born, hygiene of infancy, examination, infant feeding, diseases of the digestive system, of the respiratory tract, infectious diseases, of the blood and ductless glands, of nutrition, of the uropoietic system, genital organs and bladder, of the nervous system, malformations and deformities, surgical diseases, eye and ear, of the skin. Each section is a monograph with didactic and clinical features. The many photographs of cases make up the deficiency which inevitably follows the text upon any clinical subject. New articles have been written upon acidosis food allergy, epidemic encephalitis, heart disorders and spasmophilia. The work has been written by men who have large clinical experience and cannot fail to charm those who follow it. J. M. B.

THE SURGICAL CLINICS OF CHICAGO—December, 1919. Published bi-monthly. Price, per year, paper \$10; cloth. \$14. W. B. Saunders Company, Philadelphia, London.

Surgical Clinics for December contains the following: 1. Clinics of Bevan Presbyterian Hospital acute necrosis of the thyroid gland; senile gangrene; undescended testes; chronic viscious cycle following gastro-enterostomy; prostatic obstruction; rupture of urethra. 2. Clinic of Watkins, St. Luke's Hospital; perineonaphy, a simple and efficient operation. 3. Clinic of Shambaugh, Presbyterian Hospital; dis-

cussion of clinical problems relating to faucial tonsils. 4. Clinic of Ochsner, Augustona Hospital; compound comminuted fracture both bones of leg; plastic on face. 5. Clinic of Kretschmer, Presbyterian Hospital; haemeturia anl purpura. 6. Clinic of Beck, North Chicago Hospital; reconstruction of ears and nose. 7 Clinic of McArthur; fibromyonia of stomach stimulating stomach ulcer. 8. Clinic of McKenna, St. Joseph's Hospital; ureteral stone; varicocele operation; stone in bladder; colon bacillus infection. 9. Clinic of Berstein, Wesley Memorial Hospital; treatment of early and late infections of the hand and fingers with special reference to tendon transplantation, four cases. 10. Index to volume 2.

DANIEL MORTON, M. D., F. A. C. S.

FOOD FOR THE SICK AND THE WELL—How to Select It and How to Cook It. By Margaret P. Thompson, Registered Nurse. Cloth, ix plus 82 pages. Yonkers-on-Hudson, New York World Book Company. Price, \$1.00.

This is a practical volume. It was finished on the anvil of experience, whence comes most of our valuable knowledge, and it has been tested and proved. This is a book of recipes, the result of many years of experience in arranging, changing and adapting them so as to form a well regulated diet for the sick and for convalescents, as well as for those who are well and wish to remain so. The housewife as well as the physician and the nurse will find in this volume a valuable help and guide. The text discusses the relation of food to health and the necessity of a balanced menu. There are recipes for breakfast cereals, breads, eggs, soups, meats, fishes, cereals and starchy vegetables, green vegetables, salads and desserts, cakes, albuminous drinks, jellies, canned fruits, and cheese dishes. An additional section of the book devotes itself to treatments such as baths, sponges, hot-packs, salt-rubs, poultices, mustard plasters, enemas, douches, and directions for the proper way of filling a hot water box. A nice book for the doctor's wife.

GYNECOLOGY—By William P. Graves, M. D., Professor of Gynecology at Harvard Medical School. Second edition, thoroughly revised. Octavo volume of 883 pages with 490 original illustrations, 100 of them in colors. Philadelphia and London: W. B. Saunders Company, 1919. Cloth, \$7.75 net.

This is the second edition of this standard work on Gynecology. It is divided into three parts: Physiology and Relationship of Gynecology to the General Organism. 2. Gynecologic Diseases. Operative Gynecology. Special attention has been paid to recent advances in gynecology as shown by the following subjects which are thoroughly discussed: ovarian organo-therapy, ovarian transplantation, radium treatment of cancer and non-malignant gynecologic diseases. The whole subject of the relation of gynecology and the internal secretions is fully set out. Gynecology and sex impulse has been dealt with in a section not in former editions. Many new operations have been described and beautifully The subject matter is comprehensive, illustrated. the whole field is covered and the related organs, kidneys, ureters, bladder and rectum dealt with as well. One of the splendid features is the reproduction of microscopic specimens of the various diseases discussed. This is a fine feature of the book. The illustrations are beautiful and enlightening. They are on almost every page. Graves does his own illustrating and acknowledges that he owes much to Max Brodel for his ability in this line. Really, there is no occasion for reviewing this book. It is good and no one practicing gynecology can afford to be without it. What is the use of saying more? If you do not have it on your shelf, put it there at once.

DANIEL MORTON, M. D., F. A. C. S.

NOTE—The Medical Herald's Kansas City office will supply any book reviewed in this department at publisher's price, prepaid. If an order for two books be sent at any one time, the purchaser will be entitled to a six months' subscription to the Herald. This plan is arranged for the convenience of our readers, and we trust it will stimulate trade in the direction of good books.—Editor.

Organized at Council Bluffs, Iowa. September 27, 1888. Objects: "The objects of this society shall be to foster, advance and disseminate medical knowledge; to uphold and maintain the dignity of the profession; and to encourage social and harmonious relations within its ranks."—Constitution.





THE MEDICAL SOCIETY OF THE MISSOURI VALLEY

Annual Meeting at Omaha, Neb., Monday and Tuesday, Sept. 6-7, 1920.

OFFICERS

CHARLES RYAN Des Moines President.

PAUL GARDNER New Hampton, Ia. First Vice-President.

FLOYD H. SPENCER.....St. Joseph Second Vice-President. O. C. GEBHART.....St. Joseph Treasurer.

CHAS. WOOD FASSETT....Kansas City

JOHN P. LORD......Omaha Chairman Arrangement Committee.

THE OMAHA MEETING

The next annual meeting of the Medical Society of the Missouri Valley will be held in Omaha, Neb., Monday and Tuesday, September 6-7, under the presidency of Dr. Charles Ryan of Des Moines. The date of this meeting has been set forward beyond the usual time, at the request of Dr. John P. Lord, chairman of the arrangement committee, in order that our members may be given the opportunity to witness a novel entertainment in the ceremonial of the The dates have also been se-"Ak-Sar-Ben." lected with a view to avoiding congestion during the fall festivities. Headquarters and meeting place as usual at Hotel Fontenelle. Rooms should be engaged early to avoid disappointment. The annual dinner will be given at the Fontenelle on Monday night at 6:30, sharp. This notice is also an official call for papers, titles of which should be sent to the secretary not later than August 1st. inclosing a short abstract. They will be placed upon the program in the order received. On account of the excessive cost of paper and printing, the usual announcements of the meeting will be omitted this year. Members will therefore

look for all information in the official journal. Charles Wood Fassett, Secretary, 536 Ridge Building, Kansas City, Mo.

A luncheon will be given in the Indian room of the Fontenelle, on Tuesday, at noon, when the membeers will be guests of the Omaha profession.

Exhibits at Missouri Valley Meeting—Ample space will be allotted to exhibitors at the Hotel Fontenelle, Omaha, September 6 and 7. The space will be arranged on the mezzanine floor, where all meetings will be held. Firms desiring to exhibit should write at once to the secretary.

HAPPINESS

Half the happiness of living
Comes from willing-hearted giving;
Comes from sharing all our pleasures,
From dividing all our treasures,
And the other half is loving
First the Lord, then all things living.
So, each mortal should be sowing
Love seeds while his life is growing,
For all happiness in living
Comes from loving and from giving.
—Alice Van Lee Carrick.

MEDICAL S	OCIETY OF THE MISSOURI VALLEY	
APP	LICATION FOR MEMBERSHIP	
I hereby make application for	membership in your Society. My age is	
years. I am a graduate of	Coll	ege,
year, My reside	nce and postoffice address is	
	SIGNED	>
	M	p. p.
I am a member in good standing	of the (Must be Accor	end - m
State Society of	of the \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	3.00 E

If you are not a member of this progressive society now is the time to join. Year begins in September

DROPSY

Indications:
Dropsy of any
origin,

Bright's Disease,

Valvular Diseases.

Heart Trouble following Influenza, Cirrhosis,

Anasarca.

This is an advertisement of our sole product, into which we put all our efforts to produce as nearly a perfect remedy as possible, for just two of the many ailments of humanity which you are called upon to treat.

DROPSY AND HEART DISEASE

ANEDEMIN doesn't always relieve even these, but it will give you a better result in a greater number of cases than any other remedy, and do it without danger to your patient and with no bad after-effects. It has no cumulative action and produces no stomach disturbance; is a powerful diuretic without irritating.

Sample, literature with formula to physicians.

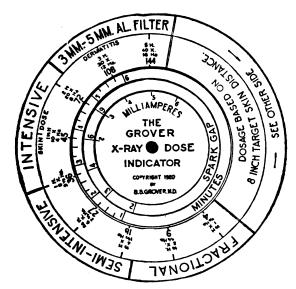
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THE GROVER X-RAY DOSE INDICATOR



(The setting shown in the above illustration is the proper one for the administration of a skin dose: Spark gap 6, mill. 2. minutes 3%=45.)

A device for the translation of the different methods of ascertaining an x-ray dose. Many methods of measuring the quantity of x-rays are employed;; Holz-knecht and Hampson pastiles; Keinbock's strips of sensitized paper; Sabouraud and Noire tint tablets and many others.

Carrying in mind all the various methods is confusing, and one must do it in order to read x-ray literature intelligently.

The Grover indicator will eliminate these difficulties at once. Not only is the translation of the units of chromatic methods into milliampre minutes easily accomplished, but it shows how to set the machine to secure any dose desired. It indicates how to make settings for fractional, semi-intensive and intensive treatments and when to employ a filter.

Manufactured of finest quality celluloid. Will last a lifetime.

Full instructions for use accompany each indicator. Price \$3.00 by registered mail. Address The Medical Herald and Electro-Therapist, 536 Ridge Building, Kansas City, Missouri.

Doctor, if you receive a copy of the Medical Herald and are not a subscriber, please take it as a cordial invitation to remit a dollar and receive our magazine for the year 1920. Turn to advertising page 68 and note the feast of "Good Things to Come" in the early issues of the Medical Herald.

Gynecological Suggestions — Beginning with this issue, starts a series of unique announcements in the form of the "Gynecological Suggestions." These suggestions appear in the advertising section of this journal and present what appears to be a page from a book of "Gynecological Suggestions." Each suggestion is a valuable hint within itself outside of the reference to the therapeutic administration of H. V. C. Each month a new page will be turned and a new suggestion presented to our readers. The hints are worth while, see what they convey.

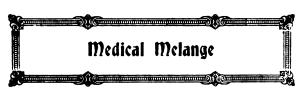
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Uniformly Satisfactory—"My clinical experience with Cactus Grandiflorus and Cactina Pillets has been uniformly satisfactory," states Dr. A. E. Salter. "It acts as a mild heart tonic and is particularly useful for continuous treatment."

Epilepsy—In epilepsy no remedy gives more uniformly satisactory results than Peacock's Bromides. This is due, first, to the happy combination of the five important bromides; second, to the greater purity of each salt, and finally, to the pharmaceutical character of the composite product. The physician should insist on the genuine Peacock's Bromides, particularly when it is desired to administer them over long periods. One to three teaspoonfuls, in water, as needed, will be found effective.

Listerine is a non-poisonous, non-irritating, antiseptic solution, of which the base is boric acid. As a base for many prescriptions it is absolutely unequalled, giving to a prescription its own qualities and rendering the prescription grateful to the patient. Listerine in its long use by physicians has never once been criticized for any untoward action upon the mucous membrane, and this is a remarkable history for a product that has been a favorite with two generations.—The Journal-Lancet, February 15, 1920.

Asthma with heart complication, after-the-flu effects on the vital organs and dyspnea in elderly people are successfully treated with Anedemin Tablets. A lightness and freedom is experienced by the patient that they have not known since the attack, and there is never any bad after-effects even though the tablets are continued indefinitely. Anedemin includes one of the active principles of squill and universally used by physicians in treating all dropsies. Liberal samples are supplied by manuacturers. Anedemin Chemical Co., Chattanooga, Tennessee, to physicians only.

Ecthol in Pyodermias—By reason of its power to raise the phagocytic index of the blood stream Ecthol (Battle) is a rational agent in such infection as effect the skin. In these pyodermias the internal use of Ecthol (Battle) will exert a splendid influence through charging the skin with a higher degree of resistance to germ organisms, and since the phagocytic powers of the blood stream are also increased such infections are the more easily combatted and brought to a fa-

vorable termination. When the need for evacuation of pus arises, and a dressing must be applied, the local application of Ecthol (Battle) will be found to check pus formation and hasten healing of the open lesion. In carbuncle and furnuculosis Ecthol (Battle) will serve a most useful purpose, administered internally and applied locally.

Relief of Headaches-With many patients there is a periodic need for relief from headaches of varying degrees. In this class of patients it is well to seek for anodynes outside of narcotics and coal tar products, if the possibility of habit-formation is to be guarded against. In these cases Pasadyne (Daniel) will be found of definite value, owing to its power to relieve pain of mild degree. In headache Pasadyne (Daniel) acts by reducing cerebral congestion. An anodyne in headache Pasadyne is particularly indicated in those cases in which the pain recurs from time to time. As a means of producing sleep Pasadyne is a thoroughly dependable drug. No danger of habit-formation attends its continued employment. A sample bottle may be had by addressing the laboratory of John B. Daniel, Inc., Atlanta, Georgia.

That old precept, "An ounce of prevention is worth a pound of cure," may be applied with particular force to typhoid fever. It is the principle that justifies all sanitary and hygienic measures. It is also the principle that dictated the adoption of antityphoid vaccination in the army, with such brilliant results. At this particular season of the year, when a large number of people are on vacation, there is always an increase in the number of cases of typhoid. The lakeside cottage or resort often lacks the sanitary arrangements which guard our health at home. The fishing camp or house boat may be lecated on a polluted stream. The well at the old farm homestead is not above suspicion. The milk at the station restaurant may have been shipped in a can that was washed with typhoid water. The sandwiches and other food may have been prepared by a typhoid carrier-another typhoid Mary. These are only a few of the risks a vacationist must take; in many ways the hazard is greater than that of the army camp. In view of this very real situation it would seem that physicians could give their clientele no truer service than to urge them to secure the protection afforded by vaccination. Many of them are already so well informed on its efficacy that little more will be necessary than to suggest the advisability of being immunized before leaving home. Further information may be had by writing to Eli Lilly & Company asking for the monograph on typhoid.

The
Management
of an
Infant's Diet

DIARRHEA OF INFANTS

Three recommendations are made—

Stop at once the giving of milk.

Thoroughly clean out the intestinal tract.

Give nourishment composed of food elements capable of being absorbed with minimum digestive effort.

A diet that meets the condition is prepared as follows:

Mellin's Food . . 4 level tablespoonfuls

Water (boiled, then cooled) . 16 fluidounces

Feed small amounts at frequent intervals.

It is further suggested:—As soon as the stools lessen in number and improve in character, gradually build up the diet by substituting one ounce of skimmed milk for one ounce of water until the amount of skimmed milk is equal to the quantity of milk usually given for the age of the infant; also that no milk fat be given until the baby has completely recovered.

MELLIN'S FOOD COMPANY,

BOSTON, MASS.

"Fougera"—Readers of the little journal published under the name "Fougera" and sent out by the firm of E. Fougera & Company, Inc., will find the next issue soon to be distributed, somewhat different in form from those previously sent out. The success which attended the sending out of "Fougera" has been such as to almost entitle it to rank as a medical journal and in its new dress, it will resemble one. Arrangements have been made by the firm to offer to American physicians a number of very valuable French and English products which have not hitherto been upon the American market and in the forthcoming issue of "Fougera," a number of references will be made to several of these. Any physician therefore, who does not receive "Fougera" regularly and who would be interested in learning more concerning therapeutic agents which deserve his attention and use, may have his name entered upon the "Fougera" list by sending same to E. Fougera & Co., Inc., 90-92 Beekman street, New York City.

As a quick eliminant in the hot weather months, Abbott's Saline Laxative should be kept in mind and on hand for daily use. It is excellent for expelling offending residues from the alimentary canal; as an initial purge in diarrhea, dysentery, ptomaine poisoning, cholera infantum, typhoid fever; for overcoming fecal impaction; to follow calomel; for emptying the bowel prior to operations; to remedy indigestion. The latter in many of the cases is due to the collecting of food residues in the lower bowel, which interferes more or less with normal propulsion through the ileocecal gut segments. Not uncommonly, malnutrition is caused by the fact that the intestinal surfaces are overlaid with uneliminated debris. And why not, since most of our food intake is normally absorbed from the intestinal lumen? As for constipation, many are most affected in summer, perhaps because

in this season the body masculatures are lax and atonic, including that of the bowel; disinclination to exercise may account for it in part, as well as lessening of the fecal fluidity through increased perspiration. The Abbott Laboratories will send samples of this excellent saline to anyone wishing to try it.

The Heart in Influenza—A number of physicians have reported a tendency in many cases that have recovered from the acute stage of influenza, to a weakened condition of the heart and of the circulation. Such a condition has often been of sufficitent acuteness to demand special treatment. Such a condition in some ways suggests the use of digitalis, but bearing in mind certain drawbacks connected with the use of this drug, a number of physicians have employed Anasarcin with very satisfactory results. Anasarcin slows the heart's action, increases the force of its contraction, does not contract the arterioles and thus renders it possible to strengthen and regulate the heart without producing untoward effects. In addition to its cardiac stimulant action, Anasarcin is also a reliable diuretic and the combination of these two properties render it a preparation that should be borne in mind, especially in cases of post-scarlatinal nephritis. It is also indicated in the albuminuria of pregnancy and will give very satisfactory results in controlling the tachycardia which is such a prominent feature of exophthalmic goitre and cardiac neuroses. Anasarcin is supplied in the form of tablets which are rigidly standardized and which enable the careful physician to accurately adjust the dosage necessary in each individual case. Anasarcin Tablets have been in use by many physicians for many years. The clinical evidence in favor of this product is conclusive. Any physician who has not satisfied himself as to the efficiency of the product may do so by writing for samples and literature to the Anasarcin Chemical Company, Winchester, Tenn.

To Produce Results

AN AUTOGENOUS VACCINE MUST BE

Skillfully Prepared

Bear in mind the importance of accurate isolation and identification of the causative organisms.

Consider the finished technique required in preparation and devitilization. Counting the suspension must be performed with accuracy, because upon this is based the dosage. Finally, the prescription must conform with the best principles of Vaccine Therapy. Such work should not be entrusted to inexperienced technicians, but should be performed only by a truly scientific staff such as that of the BEEBE LABORATORIES, INC.

AUTOGENOUS VACCINES (BEEBE) PRODUCE RESULTS

For Special Information and Culture Containers, address

BEEBE LABORATORIES, Inc.

Argyle Building

Kansas City, Mo.

Home Office and Laboratories, St. Paul, Minn.



Dr. Julius Frischer, of Kansas City, was married last month to Miss Marion Frances Sickle of Chicago.

Hay Fever—Doctor, consult your own interests. Cure the hay fever. See page 190, and send for a "Perfection."

Waiter E. Schaff, D. D. S., wishes to announce the opening of his office at "White Gables," 3520 Main street, Kansas City, Mo.

"Good Things to Come"—Be sure to read the list of original articles shortly to appear in this magazine. You will find a widely varied list of interesting topics. See adv. page 68.

For Goitre—Doctor, you should try the special goitre tablets put up by the Columbus Pharmacal Co., Columbus, O. One trial will convince you. See announcement in this issue.

Dr. Charles W. Jones, of Olathe, is the newly elected president of the Kansas state board of medical examination and registration. Dr. Jones was a major in the medical corps of the A. E. F. and had 13 months' active service in France.

Intravenous Medication—If you wish to give your patients the benefit of the latest, up-to-date treatment for anemia, syphilis, and skin diseases, write for clinical data to the New York Intravenous Laboratories, 110 East 23rd street, New York City. See announcement on page 59, advertising department of this issue.

Terraline—The advent of the summer season brings to the medical mind the probability of the occurrence of considerable gastro intestinal disturbance, irritation and inflammation. Physicians no longer treat "summer complaints" as was their custom several years ago. In accordance with well known physiological principles, the effort is at present to clean out the intestinal canal thoroughly and thus remove potential causes of irritation or infection and then to put it in as nearly as possible, a condition which will discourage or prevent the development and growth of such pathogenic bacteria as is responsible in part at least, for such conditions. Long before the recent fad for the use of mineral oil arose, it was more or less perfectly recognized that petroleum. being a sterile substance, might be used in the intertinal canal with beneficial effects in the treatment of irritation, fermentation or putrefaction. As a matter of fact, one of the older preparations, Terraline, was found to act efficiently for this purpose and it would doubtless prove of advantage to every busy doctor during the summer, to bear in mind this use of Terraline and to prescribe the product in such cases as were, in his judgment, suitable for it. At the same time it would do no harm to bear in mind the action of Terraline in relieving and soothing irritable cough and that it has given very satisfactory results in the treatment of what have been referred to as "summer colds" in which there frequently is as the principal symptom, a hard, dry irritant cough accompanied by little or no expectoration. Terraline has been on the market for a number of years and its use has been constantly growing. This is conclusive evidence of its efficacy. A sample of Terraline suffi-cient for clinical test, together with literature regarding it, will be sent to any physician on request, by the Hillside Chemical Co., Newburgh, New York.

SALVARSAN

(ARSPHENAMIN1-METZ)

0.1 gram	\$0.60 per ampule
0.2 gram	
0.3 gram	85 per ampule
0.4 gram	1.00 per ampule
0.5 gram	1.25 per ampule
0.6 gram	1.50 per ampule

NEOSALVARSAN

(NEOARSPHENAMINE-METZ)

Dosage	I,	0.15	gram	0.75	per	ampule
Dosage	II,	0.3	gram	1.00	per	ampule
Dosage	III,	0.45	gram	1.25	per	ampule
Dosage	IV,	0.6	gram	1.50	per	ampule
Dosage	V,	0.75	gram	1.75	per	ampule
Dosage	VI,	0.9	gram	2.00	per	ampule

10% Discount in Cartons of 10 or More Ampules

NOVOCAIN

(Procaine-Metz)

in the form of NOVOCAIN POWDER, NOVOCAIN TABLETS and NOVOCAIN-SUPRARENIN TABLETS

PYRAMIDON, the time-tried and result-producing antipyretic and analgesic.

These Standard Products Can Be Obtained Through Your Druggist or

H. A. METZ LABORATORIES, Inc., 122 Hudson St., New York

"We make ONE Journal do what 7 have done before."

Our Advertising Policy

We commend the advertising pages of The Medical Herald to our readers, as containing the last word in pharmaceutical achievement. We believe the claims of our advertisers to be just and fair, based upon clinical experience—the only true test. We deprecate dishonest and untruthful claims, and if proven, will not admit such to our pages. "By their works ye shall know them"-worthless remedies cannot long withstand the test of clinical experimentation. If any reader has found the claims of any Herald advertiser to be misleading or untruthful, or any preparation to be unreliable, in his practice, we will welcome full information regarding same.

> CHAS. WOOD FASSETT, M. D. Managing Editor 536 Ridge Bldg., Kansas City, Mo.





R Creosote Formalin Iodin Comp. by Inhalation, for all respiratory infections

THE PERFECTION INHALER

By Natural, Easy Inhalation Gives Efficient Service

Hay Fever patients stay at home in comfort by the use of this method. "FLU" preventive and successful treatment for doctors, nurses and patients.

To Physicians on receipt of price, Inhaler and Compound by mail, \$1.00, or six for \$5.00. Cash with order.

The Perfection Inhaler Co.

SOUTH BEND, INDIANA.

Golden Opportunities BARGAINS FOR YOU

Bargains in Electrical Apparatus—Portable Vulcan coil, type A, will do all bone work. Two good tubes. Make me an offer. Address Electric, care Medical Herald.

Systematic Development of X-Ray Plates and Films—By Dr. Lehman Wendell. Illustrated. \$2.00 postpaid. Supplied by the Medical Herald and Electro-Therapist, Kansas City, Mo.

Pulmonary Tuberculosis, Diagnosis, Prognosis, Prevention and Treatment—By Dr. J. D. Gibson, Denver, Colo. Illustrated. Just out. \$4.00. Supplied by the Medical Herald and Electro-Therapist, Kansas City, Mo.

Bathing Girls—Just out. Pretty, modest and fascinating pictures for the doctor's sanctum. Fifty cents each; five pictures, all different poses, for \$2.00. Address Art Department The Medical Herald, Kansas City, Mo.

For Sale—Unused Edwards No. 3 x-ray portable coil, tube, holder and flouroscope; fine for dental, hip and bone work; also high frequency and diatherma current; only \$100. Address Dr. E. B. Carney, Fort Scott, Kansas.

Principles and Practice of Roentgenological Technique—By Dr. I. Seth Hirsch, New York City. 260 pages, 348 illustrations. Just out. Cloth, \$10 net, postpoid. Supplied by the Medical Herald and Electro-Therapist, Kansas City, Mo.

"Poems the Doctor Should Know"—16 pages, 45 poems of war, love and patriotism, including the immortal poem, "In Flanders' Fields," by McCrae, and several answers to its challenge. Price 10 cents a copy, three for 25 cents. The Medical Herald, Ridge Building, Kansas City, Mo.

Doctor, if you receive a copy of the Medical Herald and are not a subscriber, please take it as a cordial invitation to remit a dollar and receive our magazine for the year 1920. Turn to advertising page 68 and note the feast of "Good Things To Come" in the early issues of the Medical Herald.

The Grover X-Ray Dose Indicator—Shows the correct dose for fractional, semi-intensive and intensive treatment. Will translate immediately all the different methods employed for measuring the x-ray intelligently. Price \$3.00, by registered mail. Address The Medical Herald and Electro-Therapist, Kansas City, Mo. Send for circular.

New Sex Book—A practical, common sense, plainspoken little book on the sexual functions, by Mary Ware Dennett. Price, 25c, postpaid. Address Book Department, Medical Herald, Kansas City, Mo.

Want to Buy a Chair or Electrical Equipment?—Doctor, have you something to sell or exchange? Do you want a location or an assistant? Are you looking for new opportunities? Use and read this column. Ads two cents a word. Remittance should accompany order. Address Bargain Department Column, The Medical Herald.

The Doctor's Tire—Before another issue of the Herald goes to press, the Ace Hurd Tire and Service Company will be located in their new building, 1924 Grand avenue. This company handles the Goodyear tires and Evergreen tubes and are the distributors for Superior storage batteries. Day and night free road service for tires and batteries. Doctors are advised not to wait for trouble, but to drive in our new station and let them look you over. "A stitch in time" is the old adage and it applies particularly regarding tires and batteries.

Local Anesthesia—The general practitioner is frequently called upon to do minor operations in cases in which the administration of ether or chloroform is inadvisable or inconvenient. In such cases an efficient local anesthetic should have first consideration. Naturally, one would say, this suggests cocaine with its attendant disadvantages. Fortunately, American chemists have discovered an agent, Apothesine, which has proved to be an effective anesthetic when injected into the tissues, while its use is not attended with the annoyances and risks that the administration of cocaine not infrequently entails. Apothesine is being used with brilliant results in the great surgical clinics of the country, not alone in minor surgery by any means, but in the performance of major operations of the most formidable character. Feats of surgical skill have been accomplished under Apothesine anesthesia that astonish even the most experienced observers. For example, a prominent New York surgeon recently reported that he had done 250 major operations with this anesthetic, including such procedures as resection of rib and drainage of lung abscess, gastroenterostomy, and a very extensive thyroidectomy. In minor surgery this agent is no less effective. Its action is prompt and enduring: in fact it is stated that its influence persists over an hour, thus making it possible to perform the operation and put in sutures, if necessary, without a second application of the anesthetic. A minor point, perhaps, is the fact that Apothesine is not subject to the provisions of the anti-narcotic law, but can be obtained through the retail drug trade with a minimum of trouble and delay.



Vol. XXXIX.

AUGUST 15, 1920

No. 8



HYPERPIESIA*

B. B. GROVER, M. D., Colorado Springs, Colo.

Hypertension without arterio-sclerosis, nephritis or marked cardio-vascular disease—Hypertension precedes cardio-renal disease—Diseases of the heart and kidney may be prevented—Hypertension is not a phenomenon of compensation—The importance of the Energy Index—Method of treatment. Charts of clinical cases.

Hyperpiesia is a word coined by Dr. Clifford Allbut, professor of Physic in the University of Cambridge, England, descriptive of cases of hypertension without arterio-sclerosis, nephritis or marked cardio-vascular disturbance.

Since the sphygmomanometer has come into general use it has been the custom of physicians to classify all hypertensive cases as Bright's disease or arterio-sclerosis. The condition to which your attention is called as hyperpiesia, belongs to neither of the classes mentioned. It is a condition that might be called the stage of precardio-renal disease, because of its existence probably for years before physical or laboratory examinations can detect abnormal conditions of the heart and kidney. If a person has even minor apoplectic attacks he is considered a case of arterio-sclerosis; and he may be, but it does not necessarily follow that it is the causative factor.

We have all seen cases where no sclerotic condition of the arteries could be found, nor would the urinary findings justify us in making a diagnosis of Bright's. Dr. Janeway has applied the term "chronic hypertensive cardiovascular disease" to this class of cases. This condition has been noted by many prominent clinicians who do extensive work along these lines, but it was left to Allbut to give us the happythought name of hyperpiesia for this condition.

The causes of cardio-renal disease exist long before the subject becomes a patient and aware of his condition. When symptoms such as headache, biliousness and other digestive disturbances appear, the damage is already done.

When by chemical tests the urine shows albumen and casts and decreased nitrogen output, much can be done, but too many changes will have taken place for the complete restitution to health.

The causes of heart disease have been mentioned to be excess tobacco, excess alcohol, syphilis and infectious diseases, when, as a matter of fact, they can account for but a small percent of cases.

We know very well the part played by infections (prominent among the group being rheumatism), but the part played by deranged metalbolism far exceeds all other causes.

I believe that the general idea among physicians about blood pressure is about as follows; That the blood vessels are not so much affected directly as indirectly through the kidneys which are damaged and unable to do their work properly, hence the heart becomes hypertrophied in and increased blood pressure or hypertension is the result of this increased power of the heart and that the phenomenon is one of compensation.

Nothing could be much farther from the truth. Cardiac hypertrophy does not cause increased blood pressure, neither does impeding the circulation through the kidneys cause hypertension.

Increased blood pressure is a premonitory indication of pathological changes yet to come, and is not, as has been supposed the result of arterial changes. In other words, the cause of persistent hypertension is now considered to be the primary cause of the structural changes in the arteries and kidneys.

The cause of hypertension lies in the increase of protein decomposition and the absorption of amino acids, as well as the individual sensitiveness (idiosyncracies) to articles of diet. At any rate the cause is to be summed up at once in deranged metalbolism.

The prevailing notion in the minds of many that hypertension is compensatory, and that the

^{*}Read before the Medical Society of The Missouri Valley at Des Moines, lowa, Sept. 18, 1919.

blood pressure should not be lowered is entirely disproved by the experience of many observers.

Persistent hypertension naturally causes cardiac hypertrophy which develops to overcome the resistance. This is a physiological and not a pathological process. When you find a case of hyperpiesia you know that sooner or later hypertrophy will follow unless the cause be removed. Heart murmurs are the ear-marks of previous hyperpiesia.

The effects of altitude upon blood pressure is one of oxygen hunger. In this respect there is the widest individual variations from the man who cannot withstand the least want of oxygen to the one who can go to an altitude of 20,000 feet with no ill effects.

The strain upon the circulatory apparatus imposed by altitude is very similar to that induced by extreme muscular exercise.

The effects of altitude vary greatly according to man's physical condition at the time of making the ascent.

A slight cold or an attack of indigestion or any other condition lowering his resistance effects blood pressure to a certain extent at sea level and it is quite evident that such a person will experience an uncomfortable feeling at even a moderate elevation of 5,000 feet. An increased rate of blood flow has been demonstrated in men living at high altitudes. Dr. Edward C. Schneider of Colorado Springs has made extended observation on Pike's Peak (14,110 feet) which indicate that the increase in the rate of flow is largely the result of a greater frequency of heart beat. When the heart begins to accelerate the diastolic pressure usually begins to fall and the systolic begins to raise, later on there may be a fall of both due to the overcoming of the vaso-motor mechanism by oxygen want.

In an ordinary healthy individual there is little or no effect upon blood pressure until an altitude of 8,000 feet is reached. There is practically no difference in blood pressure in a normal from sea level to an elevation of 7,000 feet. Individuals with high blood pressures who have arterial changes in the form of scleroses and those with poor vaso-motor control do badly in high altitudes (above 8,000 feet).

There is no condition which should be more frequently investigated by the physician than the arterial tension. He will be warned earlier of the presence of toxic matter in the blood, by taking the blood pressure than by any other method. Even at this late day blood pressure work is by some pseudo-scientific men termed a fad.

The sphygmomanometer like all other implements of the profession has been grossly abused and its readings used to magnify a pa-

tient's troubles, by men who have not, and probably never will have knowledge of its proper use. It has been used by quacks for the sole purpose of transferring cash from their victim's pocket to their own. Its use like electricity has been condemned by men who should know better, but happily the number of these false prophets is growing less.

We often see in medical journals and in some books such statements as "the physician should not meddle with Nature's methods until such time that she fails." Who is to be the judge of Nature's methods so as to be able to decide when or where she fails?

It is possible that Nature is trying to tell us, by the signal of hypertension that a storm is approaching and to advise us to put our house

in order.

From many men we hear that blood pressure is a provision of Nature and is always compensatory. They say, also that a contracted kidney impedes the circulation, and that in order to overcome the resistance and be able to do its work the heart hypertrophies and this increase in the heart's energy causes hypertension.

The argument that hypertension is Nature's defense will not hold good, as the condition antedates by months and even years the kidney les-

ion and hypertrophy of the heart.

Toxemias develop, and the poison irritates the adrenal and cardiovascular mechanism as well as the heart muscle itself.

Does hypertrophy tend to relieve this condition? No, because these poisons are the direct cause of the hypertension. Nature's methods misunderstood.

When a fire is built within the body to keep off the foe man calls it fever and along comes the doctor with a bucket of acetanilid and puts out the fire. Again, Nature's methods misunderstood.

There are cases of myocardial inefficiency, clinically shown by dyspnoea, cyanosis and edema, with no hyper or hypotension. Where has Nature gone? She is again misunderstood.

Venous stasis of the liver or altered viscosity of the blood may occur and result in hypertension and no lesion of the heart be demonstrable. A family row may cause hypertension; does nature raise the blood pressure to stop the row? Again misunderstood.

The systolic pressure represents the energy of the heart during systole, the diastolic the energy factor in overcoming end resistance. A high diastolic and small pulse pressure denotes insufficiency of the myocardium—a high systolic a low diastolic shows aortic insufficiency

I believe that we should know the amount of energy spent by the circulatory system in a minute or an hour. We need this information

especially in cases in which we fear a giving way of the vessels, such as apoplexy and other hemorrhages.

Barach has called the method of obtaining this information the "Energy Index." He states: "From the pulse rate we know how many systoles and how many diastoles to each minute there are in the arterial tree." For example, if the maximum pressure is 120mm, the minimum pressure 70mm and the pulse rate 72 per minute, the exertion in one minute would be:

In systole120x72 or 8,640 mm. of Hg. In diastole70x72 or 5,040 mm. of Hg. In both190x72 or 13,680 mm. of Hg.

which represents the total effect exerted by the circulatory system in one minute.

The advantage of this method will appeal to you, for it is not always that in a high systolic pressure we have also a high diastolic, since often the reverse is true.

I have seen it mentioned many times that the pulse rate is of no significance in taking blood pressure. This seems very unfortunate for the reasons heretofore given. It is true that the pulse rate may be very slow and the blood pressure high, or the rate may be rapid and the blood pressure low or vice versa.

It is not a factor in producing hypertension, but the wear and tear on the vessels by numerous systoles and diastoles is at once apparent. To illustrate, take three cases in apparent health whose systolic, diastolic and pulse pressures are within the limits of normal, as follows:

Case 1. 120 plus 70 x 70 50 13,300 mm. of Hg. Case 2. 130 plus 104 x 84 26 19,956 mm. of Hg. Case 3. 135 plus 105 x 85 30 20,600 mm. of Hg.

It has been shown by repeated experiments upon hundreds of cases that a total energy index consistent with safety to the vascular system is between 19,000 and 21,000 mm. of Hg. We have been taught that a pulse pressure between 26 and 56 is within normal limits. Let us analyze these cases without taking into consideration the energy index.

No. 1 systolic 120, diastolic 70, pulse pressure 50, normal.

No. 2 systolic 120, diastolic 104, pulse pressure, 26, normal.

No. 3 systolic 135, diastolic 105, pulse pressure 30, normal.

These pressures are within normal limits as well as the pulse rate. Without consideration of the energy index we would be led to believe, by all records of the sphygmomanometer, that the circulatory systems of these cases called for no particular attention on our part, but by careful analysis with the energy index we find case No. 1 perfectly safe, No. 2 at safety limit and No. 3 entering the danger zone. Numbers 2 and 3 call for treatment.

Let us consider persons of another class who are often heard to remark, "Never felt better in my life."

S.	D.	P. P.	P. R.	Energy . Index
No. 1170	115	85	80	22,800
No. 2170	120	50	80	23,300
No. 3160	120	40	84	23,520

Upon a thorough physical and laboratory examination of all these cases there are no discoverable lesions. Upon carefuly analysis we find No. 1 with a systolic pressure of 170 a little high; diastolic 115 a little high, the pulse pressure of 55 considered normal, pulse rate of 80 considered normal, hence nothing to worry us; but when we go a little we find an E. I. of 22,800 and, knowing that the vascular system is carrying a load at or beyond safety, we institute treatment and save him from disaster.

No. 2, systolic pressure 170 a little high; diastolic 120 a little high, but pulse pressure only 50 and pulse rate 80, with no physical nor laboratory signs we may let him go with a little advice about intake or proteins and not to over exert himself,, but when we look at the energy index which is 23,300, we feel that something should be done.

No. 3 is sixty years old and his systolic pressure only 160; no significance, we say. With his diastolic 120, a little high, but as his pulse pressure is but 40, which is absolutely normal, why worry? But hold! Go a little farther and we find his E. I. 23,520, the highest load of any of the three cases. Let us then commence a vigorous treatment and add ten years to this man's life.

The blood of man completes the circuit of the body about two and one-half times a minute. The force expended upon the circulatory system in twenty-four hours is sufficient to raise the body of an ordinary man two-thirds of a mile into the air. If by a strenuous life, excessive intake of food and possibly alcohol, he increases his energy index 50 per cent, it is not difficult to understand that he will reach the gate of St. Peter many years in advance of when he should.

Treatment—The ideal treatment for hyperpiesia is found in high frequency currents by the auto-condensation method. The patient should be treated daily until the systolic pressure reaches the same point with each treatment. This will be the point of fixed tension for that individual, and it will be impossible further to reduce the pressure. Auto-condensation cannot impair cardiac sufficiency. When the point of fixed tension is found, the frequency of treatment is so regulated that this point may be maintained.

There are a few don't in connection with autocondensation treatments: Don't employ autocondensation in cases of low systolic and high diastolic pressure. Don't employ more than 300 mm. in old cases of arterio-sclerosis until you are assured that your patient will withstand more to his advantage. Always watch your patient and when the veins of the wrist begin to dilate or the patient begins to perspire, stop the treatment for that time. You will soon learn the milliamperage best suited to each patient. The range is between 300 and 600 mas. Don't suddenly run up the dose. Start with 300 ma and gradually increase the milliamperage by widening the spark gap. The best results are obtained by low voltage. The rheostat set on the first button will be found sufficient in fat juicy subjects, but in the attenuated you may have to use the entire spark gap and the second or third button of the rheostat.

The causes of hyperpiesia must never be lost sight of; endeavor to find the particular article of diet that has produced the condition, and eliminate it. Do not lose sight of the fact that the cause will be found in deranged metabolism and will have to be ascertained in each individual case.

My method of finding the causative factor is, eliminate all proteins from the diet for a period of one week, then allow one protein a day for three days, and so on until the offending one is found, then eliminate it from the patient's diet forever.

I have had cases of hyperpiesia that reported once in three months, and found treatments unnecessary for periods as long as one year. If the hyperpiesia has continued long enough to produce pathological results, it is patent that the period of observation is very much shortened and may require weekly observations.

The blood pressure in hyperpiesia can always be reduced to normal and be maintained if it has

not exceeded 170 systolic.

In advanced cases of arterio-sclerosis with a systolic pressure above 200, much may be done to ward off a cerebral accident.

In cases of nephritis with hypertension, while the pressure may be lowered it cannot be maintained without increased elimination by the kidneys.

To show that some physicians outside of those who make a specialty of electro-therapeutic methods are seeing the light, I desire to quote Prof. Allbut in Musser's last edition (1917) of Practical Treatment. He says: "I may say, however, that in my farther experience of the high frequency current in cases of high blood pressure, I rave reason to speak with increasing confidence of its beneficial effects."

Effects of Autocondensation — The reasons for curing hyperpiesia by auto-condensation, and its beneficial results in all cases of hypertension, may be stated to be because it increases tissue changes by increasing oxidation of nitrogenous matter in the body; its special effects upon the protoplasm of tissue cells; its elimination of carbon dioxid and the rapid elimination of toxins; its increasing oxygen carrying power of the blood

as well as causing the increase of hemoglobin These effects are due to an action upon the sympathetic nerves controlling vaso-motor, secretory and peristaltic functions.

An enlarged heart, whether it be from hypertrophy or dilatation, is reduced by auto-conden-

sation

There is a decrease in weight on account of increased oxidation. This is noticeable in cases of obesity.

There is an increase of bodily temperature from one-half to one degree F., due probably to its profound effects upon the vasomotor system.

It is necessary to administer laxatives during these treatments to avoid effects of increased metabolism.

If a kidney is not so contracted that it cannot perform its function there is no treatment that will be of so much service as the high frequency current by diathermy.

Allow me to urge the importance of periodic examinations of the blood pressure of supposed healthy individuals in middle life to detect and correct existing faulty conditions. The supreme duty of the clinician should be to teach his patients how to live, how to correct and control then appetites and live in a way that will prevent the otherwise certain cardio-renal disease.

208 Colorado Building.

GENITO-URINARY AND SKIN DISEASES IN THE RECENT WAR*

THOMAS M. PAUL, St. Joseph, Mo.

Upon entering the army, the writer was placed in charge of the genito-urinary work at Camp Alexander, Newport News, Va. This camp was composed solely of negro laborers and their white officers. When a new assignment of negroes arrived, they were subjected to a physical examination and all those found unfit were marked "Domestic Service Only," and the remainder were sent overseas. Most of these men were from the South, and it was found that from 25 to 33 per cent were venereal. The number of patients constantly on hand was never less than 3,500, and it often exceeded 4,000. The work was done by myself, ranking as captain, assisted by two, and later three, lieutenants. The demand for the manual labor performed by these men about the port was so great, and the personnel and facilities for treating them so inadequate. that only about three-fourths were under treatment at any one time. Those under treatment were allowed one day out of four for this purpose and had to work during the interval.

The infirmary was a long, narrow, one-story, wooden building, covered with tar paper. It had

^{*}Read before the Medical Society of the Missouri Valley at Des Moines, Iowa, Sept. 18, 1920.
*Read and published by permission of the office of the Surgeon General U. S. Army.

a partition running down the middle, and an iron sink, with cold running water, in each side. A "home made" wooden table was used when it was necessary to lay patients down, and the instruments consisted of a standard army G. U. kit in a canvas roll. About twelve colored corps boys assisted the medical officers. Only a few of these boys knew the rudiments of reading and writing. Owing to this, and the fact that the patients were changed at the will of the non-medical commanding officers, it was impossible to keep accurate records. Forty to fifty patients could be admitted to the building at one time, and over six hundred were treated daily. These poor facilities were due to the fact that the medical department of the army had suddenly thrust upon it a stupendous task; that it was not unmindful of its obligation was evidenced by an allotment for the building and proper equipment of a new infirmary which would have met all requirements. The signing of the armistice and an order to close the camp, prevented its erection.

About 5 per cent of these negroes had chan-These were treated with a mixture of calomel and zinc sulphate, 20 per cent each, in chlorine water. This was applied to the ulcer on a pledget of cotton and held in place by a bandage or the pepuce. If on removing the dressing the next day, the ulcer did not present a healthy appearance, this treatment was repeated. Usually the ulcer became healthy after the first dressing and rarely a third application had to be made. It is probable that many of these sores were due to infection with the treponema as well as the Ducrey-Unna bacillus. Suppurative buboes occurred often when these cases were not seen early. They were opened. dressed aseptically, and the patient confined to quarters. In a few days, he was marked "Full Duty" and the wound then dressed once in four days. Hard work did not interfere with healing, and they certainly closed more quickly in the negro than in the Caucasian.

Syphilis was very common and pursued a very mild course. Typical hard chancres were frequently seen and were treated locally with a mild antiseptic, such as boric acid or calomel. A dark field apparatus was not available and search could therefore not be made for the spirocheta. Wassermann tests were made for us at the Embarkation Hospital, about four miles distant, but transportation facilities were inadequate and the laboratory officer objected to us sending all we were able. A clinically charactertistic initial lesion would be followed by typical glandular enlargement and a few mucous patches in the mouth, but no general cutaneous efflorescence. If it had been possible to do routine Wassermanns in all of the negroes coming to this camp, the proportion of positives would undoubtedly have been very large. Iritis, optic neuritis, tabes,

paresis, and gummata were never seen. Either the drafted negro was too young for tertiary manifestations, or syphilis is a very different disease in the southern members of this race than in the northern negro and white man. Injections of salicylate of mercury were given, but facilities for administering arsphenamin were not available.

Gonorrhea ran rife among these men; it was called "running ring" or "running range" by them, and if allowed to do as they pleased, they ignored it utterly. The duration, according to their statements, was never less than three, and often as long as twelve years, and some of them said they were born with it. The number of men sent to this camp was so enormous that prostatic and vesicular massage, with microscopic examination of the expressed secretions was impossible; stripping the anterior prethra and the two glass test showed that few had posterior urethritis. Men in whom no discharge could be expressed from the meatus and had a few threads floating in clear urine were passed as healthy; practically none of the negroes arriving at this camp were free from "clap threads." All of the men passed as healthy by us were reexamined before embarkation for overseas. As a result, many cases were discovered which we had missed. To obviate this error, the men were sent on a "hike," for an hour or two, and told not to urinate before being examined. Disobedience of this order is the only explanation which can be given for our failure to detect all cases. These negroes were so ignorant and so untruthful that their statements as to the number of attacks they had had could not be depended upon; if obtainable, the history in nearly all cases would undoubtedly have been, "As soon as the severity of the symptoms of the first attack subsided, sexual promiscuity was resumed, and it is impossible to say how many re-inocula-tions have occurred." Perhaps twenty cases were seen in which the glans and part of the urethral floor had sloughed off in consequence of a neglected paraphymosis; the stump had healed over and the urethra opened on the under surface of the penile shaft.

On commencing treatment, the meatus discharge was subjected to a microscopic examination. This was ably done by two colored medical graduates; about two hundred slides were examined daily. Silver proteinate, in solutions of ascending strength, were used in the form of hand injections, after the two glass test had been made. These patients could not be depended upon to treat themselves, and each man received the injection by means of a hand syringe, into the anterior urethra, once in four days. If the second glass was cloudy, he was given tablets of salol and hexamethylenamin to take by mouth. The idea, prevalent among these men, that inter-

nal treatment was the only effective method, caused them to take these tablets faithfully. After a 3 per cent solution of silver proteinate could be used without causing a strong sensation of burning, nitrate of silver, in solutions of ascending strength, was substituted as a hand injection. As soon as discharge ceased and the urine became clear, the prostate and vesicles were massaged and their secretions examined. If pus cells were present, systematic massage, followed by intra-vesical irrigations of 1-4,000 solution of nitrate of silver were given. Two hundred massages, in addition to the other work. were sometimes given in one day. About 5 per cent of these men were found to have prostatitis, and one to five massages would cause the pus cells to disappear from the expressed secretions. No meatus discharge, urine free from threads, and prostatic and vesicular secretions in which pus cells were absent, called for an injection of one-half per cent nitrate of silver and microscopic examination of the resulting discharge. At first this would be found full of pus cells, then these would disappear, and then the injection would fail to produce any discharge whatever. In most cases this would be accomplished in three visits: rarely, it required five. The microscopic examination of these slides was made by men who did not know the source of the specimen. was done in hundreds of cases, and the results, as stated above, were invariable. This corroborates the idea that silver salts do not act directly upon the gonococcus, but indirectly by stimulating nature's efforts to disinfect the mucosa by the outpouring phagocytes. After the patient had reached this point, the largest sized bougiea-boule that the meatus would admit, was passed to the cut-off muscle, this followed by a Van Buren steel sound into the bladder, and an irrigation of 1-4,000 solution of silver nitrate. The sounding of 125 negroes, by the writer alone, was considered a day's work. Despite the number of men handled, strict asepsis was maintained, although the sounds were allowed to remain in each patient but a few moments. Strictures were detected in almost every patient; they were usually multiple, of large calibre, and of the "hard infiltration" type. Appreciable obstruction to the urinary stream was rarely encountered, and in a few cases, a filiform only could be passed.

Sometimes men would be kept constantly at work, and therefore prevented from completing their treatment, but we were able to follow over 600 cases to a cure; these showed a complete recovery on an average of three and a half weeks. This disease, as stated above, was confined, in 95 per cent of cases, to the anterior urethra. In several cases, a para-phymosis had to receive a dorsal slit, epididymitis was seen in only two cases, conjunctivitis was encountered in only one

case, and peri-urethral abscess was never seen. Chancroids and gonorrhea, chancre and gonorrhea, and all three combined, occurred in many of these patients. The rule was to treat the sores first and ignore the gonorrhea until they healed. Many of these men had "rheumatism." In many instances this was a form of malingering, and in others it was impossile to determine whether it was due to gonorrhea or a focus of infection elsewhere. A peculiar form of tachycardia was observed in a large number of these men by the internists. Some of these officers maintained it was due to a syphilitic myo-carditis and others to a toxemia of gonorrheal origin. Malignant endocarditis was not observed in any case. The fact that gonorrhea in the southern negro seldom invades the posterior urethra and its adnexa. and disappears promptly under the simple treatment above described, given only at four day intervals, plus the fact that it is not aggravated by the hardest kind of physical exertion, makes it evident that these men are more resistant to this infection than their northern cousins and the white man.

It is unfortunate, for reasons already given that it was impossible to keep accurate records of this enormous amount of clinical material; their scientific value would have been inestimable. It is also greatly to be regretted that opportunity was not afforded to see these men regularly, but the war had to be won, and their commanding officers undoubtedly gave them as much time for treatment as was compatible with the amount of manual labor which they had to perform; if freight cars were not unloaded and ships coaled in time, the effect on our country would have been more disastrous than that resulting from the imperfect treatment which these men received.

After five months of the above described work, the camp was closed and the writer ordered to U. S. Army General Hospital No. 24, Parkview Station, Pittsburgh, Penna., and placed in charge of the G. U. Ward. All of the patients here were white men and most of them were from overseas. Every facility for modern treatment was available and the institution had a well equipped laboratory, under the supervision of a competent officer. The G. U. Ward was under the care of an efficient nurse, and a sergeant from the medical detachment served as assistant and kept accurate records. The entire time of these patients was available since they were not under the command of non-medical officers.

Six contracted syphilis while at the hospital: nine had it before entering the service. Clinical diagnosis was checked by dark field examination of the secretion from all suspicious lesions and repeated Wassermanns; the effect of treatment was determined by the blood serum reaction and spinal fluid examination as well as clinical observation. One case of paresis developed in a

member of the medical detachment, and a patient with spastic paraplegia, with loss of control of bladder and rectum, was brough to the hospital. The Wassermann, gold sol, cell count and globulin tests were found positive in the spinal fluid of two others. Another man reached the hospital with partial gummatous destruction of the nasal septum and hard palate. Injections of arsphenamin intravenously and salicylate of mercury intramuscularly, were regularly given; in addition to this, terteriary cases were put upon iodide of potassium by mouth.

Patients with gonorrhea treated themselves with hand injections of silver proteinate, in ascending strengths, held in five minutes at each treatment, and injections taken four times a day. When the solution used failed to cause a feeling of mild warmth, its strength was increased until this warm sensation was reproduced. If the second glass became cloudy, the patient was put upon salol and hexamethylenamin by mouth. Local use of silver nitrate followed the proteinate, when a 3 per cent solution of the latter failed to rid the urethral mucosa of gonococci. As soon as acriflavine could be obtained, all patients were put upon it. The short experience the writer has had with this remedy causes him to believe it to be too irritating in the early stages of the disease. Silver proteinate in ascending strengths, silver nitrate in ascending strengths, followed by acriflavine in ascending strengths, seems, at present, to be the ideal sequence. It certainly clears up some cases of anterior urethritis after failure of the above method of using silver salts. Prostatic and vesicular massage, with microscopic examination of the expressed secretions, was, of course, faithfully carried out in all cases until pus cells disappeared. Epididymotomy, in two cases of epididymitis, was followed by ideal results. Patients in whom a focus of infection was being sought, were sent to this ward for routine examination of their prostate and vesicles, whether they gave a history of having had gonorrhea or not. Five contracted their urethritis while at the hospital; three had it before they came. Added to the six syphilitic infections, already referred to, this gives a total of eleven cases of venereal disease, contracted by about 1,200 men during a period of over six months. man became infected who had taken prophylaxis. Several cases of stricture, resulting from former gonococci infections, received suitable treatment with sounds. No cases of chancroids were seen.

Two patients had a "saddle paralysis" with loss of control of the bladder and rectum. In each case this was due to injury to the lower spinal cord by a bullet from a machine gun. One of them had constant dribbling of urine, necessitating the use of a white enamel urinal while in bed, and a rubber urinal while up and about. The other could empty his bladder by

the aid of his abdominal muscles, but had a large amount of residual urine. The use of an interrupted faradic current, delivered to the bladder surface by a hard rubber electrode with a copper wire centre, passed in through the urethra, brought about a miraculous improvement in this patient's ability to completely empty his bladder. Both these patients could wear clothes and get about by keeping their bowels constipated. The cystoscopic appearance of the bladders in these cases was similar to that seen in locomotor ataxia.

One case of supra-pubic vesical fistula, persisting after cystotomy for stone, healed promptly on the application of the Paquelin cautery.

A fragment of schrapnel traversed the right buttock and perinaeum of another patient, severing his urethra; the wounds had all healed before reaching this hospital, leaving a dense traumatic stricture and urethral fistula. He had not fully recovered from an external urethrotomy when the hospital was closed and he was transferred elsewhere.

A patient with tuberculosis of the bladder and both kidneys, and foci in both lungs, was transferred to an army hospital for the tubercular.

A stone in the pelvis of the right kidney was demonstrated by an x-ray catheter and skiagram in another patient.

A man who developed enuresis nocturna while in France, recovered from it, while at this hospital, without treatment.

Of the skin diseases, a case of psoriasis gyrata and one of infectious eczematoid dermatitis proved very rebellious to treatment. Many cases of acne vulgaris of the face, back, and sometimes chest, were seen. A few cases of eczema, and a good many cases of dermatitis venenata, responded promptly to treatment. A disease termed "French itch" was occasionally observed in overseas men. It did not have the distribution characteristic of the sarcoptis, and the mite could not be found. It did, however, disappear promptly when the usual treatment for scabies was applied. None of the negroes at Camp Alexander complained of skin diseases.

Lectures on venereal disease were delivered, at regular intervals, to the officers in the "school for paper work," and to the negroes at Camp Alexander. The intelligence of these negroes was such that these lectures probably did very little good. At Parkview, lectures were delivered, and motion pictures were shown, to medical detachment men and ambulant patients. The low venereal rate at this institution conclusively shows that this effort was not misdirected. In response to a request from the Physio-Therapy Aides, who feared contracting syphilis through the hands in giving massage, the writer was ordered by the commanding officer to lecture to them on venereal diseases. Many of the educational aides

attended these lectures, in response to an invitation by the physio-therapists.

This paper is limited to the experience of the writer; its title is therefore broader than its scope and was chosen for the purpose of brevity.

Physicians and Surgeons Building.

References: (1) "The Effect of Organic Silver Salts on the Gonococcus in the Male Urethra," by the author, Medi-cal Herald, January, 1913, and "Why Silver Salts Do Not Cure All Cases of Gonorrhea," by the author, Urologic and Cutaneous Review, October, 1915.

ACUTE MECHANICAL ILEUS

J. R. BRINKLEY, M. D., Chicago, Ills.

In reporting this case of ileus I do not expect to show any new etiology or pathology; however, I believe that this case will tend to teach us that we are not to be too optimistic concerning our post-operative laparotomy cases, for even when we have done a clean laparotomy, and the patient has made an uneventful recovery, ileus is liable to occur.

The patient has two entries to the hospital; I will riefly describe the first, and discuss in detail the second.

Patient No. 40. Mrs. Fay W., age 28, white, occupation, housewife; mother of two children, both living. Family history, negative; present illness: since the birth of her baby she has suffered from more of less abdominal pain, severest in the appendiceal region, and of the left More or less constipation, irregular menses, has lost some weight, and says she is "all run down."

Physical examination shows a very well nourished woman, height 5 feet 4 inches, weight 124 pounds; head, neck and chest shows negative; pressure on abdomen elicits much tenderness, well marked over McBurney's point, and the left lower quadrant; however, she complains of tenderness in all parts of the abdomen. By palpation I was enabled to outline a mass in the left lower quadrant, and found some enlargement in the appendiceal region.

Patient answers questions stupidly, and is quite nervous—fearful of being subjected to pain during her examination.

My diagnosis was cystic degeneration of the

left ovary; and chronic appendicitis.

First entry December 2, 1918. Operation was performed under ether. Median line incision between the umbillicus and symphysis. Upon opening the abdomen I found a large haematoma of the left ovary, which was removed together with the ovary and tube; also, I found complete calcification of one half of the right ovary; the calcified portion was removed. The appendix was bound down posteriorly with many adhesions, which were ligated and divided, and all raw surfaces and bleeding points covered over.

The appendix was removed in the usual way, excepting that I do not treat the stump with phenol or alcohol; and the linen suture is carried through the stump and continuing the purse string suture is made and stump invaginated.

This takes much less time than by treating with phenol or alcohol, which I doubt has any special value. Granting phenol kills the bacteria. there are millions to be fed right back through the lumen of the stump.

Abdomen was closed with running sutures of No. 2 catgut in the peritoneum; lock sutures of same material in the deep fascia; linen sutures for skin. No drainage.

Patient was on the table 45 minutes, and was returned to her room in good condition. On the 21st she was offered her discharge from the - hospital; however, as she could not secure domestic assistance that week, she remained until December 27th, when she walked home, a distance of two blocks.

The record shows that during her stay in the hospital her bowels moved daily without the aid of enemas or cathartics. She felt fine-was free from pain, appetite good, and had gained some weight.

Second entry January 1st, 1919. On January 1st, about 7 a. m., I was called to see her. She stated that the previous day she had eaten three good meals-that they had some fresh pork chops, to which she had helped herself quite freely—that after supper she was seized with a cramp-like pain. The point indicated showed it to be in the mid-epigastrium. The pain lasted about 30 minutes; after this she went to bed and had a good night until about 5 a. m., when pain again developed, lasting about one hour. At 7 o'clock the pain became almost unbearable, and I was called. Patient also stated that her bowels had acted freely the evening before, and she had a slight movement this morning.

Physical examination revealed no abdominal distension, unless very slight over mid-epigastrium. No peristaltic waves were noticed. No history of nausea or vomiting. In the absence of other symptoms, I concluded, or hoped, her trouble was due to too many pork chops, and ordered an enema consisting of 1 ounce magnesium sulphate, 1 ounce glycerine and 1 ounce of water; this to be repeated every two hours. I gave her 1/4 grain morphine and 1-150 atropine. No results from the enema, excepting some flatus.

Patient was free from pain until that afternoon at 3 o'clock, when pain and vomiting started simultaneously, vomitus consisted of mucus and greenish fluid; pain was almost constant, as was also, the desire to vomit. She had an anxious expression and sunken eyes. At this time there was some abdominal distension with meteorism. Temperature 98.6 F.; pulse 88; respiration 28; leucocyte count 11,000; blood pressure, systolic. 115; diastolic 75. Specimen of urine showed an

acid reaction; trace of albumen; no sugar, casts or acetone. A few white and red corpuscles were found.

Patient was returned to the hospital immediately. Another 1/4 grain morphine and 1-150 atropine was given; also, high enema, consisting of the following: glycerine 6 ounces, tincture lobelia 3 drams, saturated solution magnesium sulphate to make one quart. Physotigimin 1-50 grain, alternating with 1 ampoul pituritin every 4 hours. No results from the enema, excepting flatus and mucus. About 7 p. m. the nurse reported fecal vomitus.

Diagnosis of acute mechanical ileus was made, and the patient prepared for immediate operation.

It is not difficult to recognize ileus in plainly marked cases; however, there are many cases in which a correct diagnosis is impossible.

In incomplete or partial ileus, we have an intestinal stiffening, or exaggerated peristalsis—we can feel and see the peristaltic waves, and may have alternating attacks of diarrhea and constipation.

In complete ileus there is usually an entire cessation of peristalsis, gas and meteorism, and

vomiting may be absent.

In ileus, the site of obstruction cannot always be determined by the location of pain. When there is an obstruction in the small intestine, the pain is usually most severe around the umbillicus; often in the epigastrium. In ileus of the larger intestine, the pain varies in position according to the portion of gut that is distended. When the obstruction is in the descending colon, there will be pain, naturally, in the left abdomen; when in the sigmoid, the pain is felt in the small of the back, or the umbillicus.

I felt reasonably sure that my diagnosis of acute mechanical ileus was correct. I did not think it dynamic or adynamic ileus, because the patient had just recovered from a rather extensive laparotomy, and might have adhesions; then again, the symptoms came on very suddenly, following excessive eating of forbidden food, which, no doubt, produced an intestinal indigestion, with increased peristalsis, which, in turn, would cause many loops of the bowels to change their positions.

We may get fecal vomiting in peritonitis involving the bowels; however, this was excluded, for patient had a normal temperature.

In making a diagnosis of acute mechanical ileus, due to adhesions, it is, of course, necessary to consider the other causes and varieties of ileus, in order to exclude them. To do this, we must have some classification in mind, although there may be many causes in any case and no classification that will hold good.

For example: Mechanical ileus may be due to all varieties of external strangulated hernia;

femoral, inguinal, umbilical, venereal, vaginal, etc.; internal hernia, hernia into Douglas pouch, diaphragmatic, congenital or acquired slits by injury or operation, diverticula, adhesions, etc.; adynamic or paralytic, attributable to general or local peritonitis, uremia, embolism, or thrombosis of mesenteric vessels; chronic drug poisoning; the reflex of pedunculated tumors and mesentery; intra abdominal hemorrhage; strangulation of omentum, hepatic or renal colic, trauma, cord and nerve lesions, ptomaine or lead poisoning.

It might be well in this connection to mention a few of the symptoms of occlusion of the intestine at different points, as enumerated by Keen.

Pyloric Occlusion: Vomiting mucus mixed sometimes with blood and food particles. Stools rare, emissions of gas infrequent. Pain in epigastric region and back. More or less pronounced distension of the stomach. Resistance in the pyloric region.

Duodeno-Ampulla Occlusion: The same symptoms as those of pyloric occlusion plus

icterus.

Duodenal Occlusion: Vomiting food with or without bile and pancreatic juice. In the stomach bile and pancreatic juice in abundance. The vomitus is very abundant, the patient rejecting much more than is taken. The stools and gas are rare, or completely lacking. Regional meteorism of the epigastric region. Retraction of the region below the umbilicus, at least in comparison with the enormous distension of the stomach.

Jejuno-Iliac Occlusion: Vomiting at first mucus mixed with bile, later fecal vomiting. Stools and gas almost entirely absent. Regional meteorism of the middle part of the abdomen, more or less pronounced in proportion to the high or low seat of the occlusion.

Ileocecal Occlusion: Vomiting rarer and less frequent than in the preceding form. Stools and gas wholly lacking. Regional meteorism without involvement of the colon. Localized tenderness in the illeocecal region. Tenderness in the right half of the pelvis to rectal or vaginal touch in many cases. Occlusion of the hepatic flexture. Vomiting is late, may be lacking altogether. Stools and gas absent. Pronounced meteorism more or less involvement of the diaphragm. Distension of the ascending colon. Pronounced tenderness in the hepatic region. Enemas well tolerated

Occlusion of the Splenic Flexure: Vomiting later or absent. Stools and gas absent. Meteorism pronounced with marked involvement of the diaphragm. Distension of the ascending and transverse colon. Tenderness in the region of the left hypocondrium. Large enemas are not so well borne.

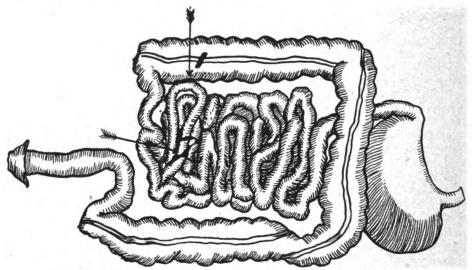
Sigmoid Iliac, or Pelvic Occlusion: Vomiting late or absent. Stools and gas absent. Me-

teorism very pronounced. Colon distended. Embarrassment of the heart. Occasional disappearance of dullness of heart and liver. Small enemas are more or less well supported, according to the seat of the obstruction. When the seat of the obstruction is in the ileum, palpation enables one to determine it; but if the seat of the occlusion is in the pelvis, the obstacle cannot be felt as a painful point to external palpation. Rectal or vaginal palpation enables one, ordinarily, to detect it.

Rectal Occlusions: Vomiting slow or absent. Stools and gas absent. Serious embarrassment of the viscera. Even small enemas are not well supported. Rectal touch determines location of the obstacle. In mechanical ileus there is always a characteristic recurrent colicy pain, soon followed by vomiting. The vomiting tends to increase in frequency and amount. The vomiting is due to stagnation and backing up of fluids, indigested food, intestinal and gastric secretion.

The patient was taken to the operating room at 8:50 p. m. The old incision was excised and the scar tissue removed. Upon opening the abdomen there was found some free fluid and flakes. The intestines were very red, highly inflamed and greatly distended with gas and feces. Believing that the obstruction was low down and in the neighborhood of the old appendix region, I at once located the junction of the ileum and caecum. At this point I found a coil of jejunum that was twisted over itself and grown fast to its own surface, at the same time beingattached to the caecum. This was broken loose, when the gas by its own pressure began to flow through the portion of intestine that had collapsed. The raw surface of the jejunum were carefully repaired with gastro-enterostomy suture, and the abdomen carefully explored for other adhesions.

You must always remember that you may have more than one obstruction and it is never



17.1. Jejunum adhered to point near caecum. 2. Jejunum twisted upon itself.

When we have an ileus low down the amount of fluid vomited is enormous. The lower down the obstruction the greater the amount of fluid; the higher up the obstruction the less amount of vomitus. In an uncomplicated case of ileus we would not expect a hyper-normal temperature. The presence of fever and leucocytosis suggests something else, or a combination of ileus and peritonitis. Or our patient might be suffering from some acute disease when the ileus developed, and we would have temperature and, possibly, leucocytosis. Of course this does not prevent our having an ileus due to some inflammatory condition in the abdomen. For some time it has been our routine to empty the patient's stomach with the stomach tube, just before starting the anesthetic. In this way our patient does not drown in secretions or vomitus.

safe to close up the opening without a careful inspection.

No other obstructions were found. The idea of a drainage tube did not seem advisable; I was fearful of infection from outside air, or otherwise. Peritoneum was closed with a running No. 2 catgut suture; fascia with lock stitches of catgut No. 2, and skin with interrupted linen sutures.

Patient was in rather poor condition, and was returned to her room at 9:15 p. m., having been on the operating table about 18 minutes. Condition of pulse at end of operation 130, respiration 24, temperature 100 F. rectal.

Proctoclysis of normal salt solution was ordered to be given every two hours. Physostigmin sulphate 1-50 grain every 4 hours was again ordered together with 1 ampoul pituitrin, alternately. She voided two ounces of urine at 1:40

a. m., January 2nd. I saw her at 7:30 a. m. Chart showed she had four large dark emesis, since the previous night. Had rested very little. Morphine 1-8 grain and atropine 1-300 was ordered p. r. n. Temperature 100.2 F., pulse 132, respiration 24. High S. S. enema returned clear. Patient suffering. Small amount of gas. At 9:25 a. m. 1 ounce oleum ricini was given; at 12:55 p. m. S. S. enema returned with more gas than before. At 1:10 p. m. emesis. 3:20 p. m. S. S. enema returned with gas. 3:25 p. m. 10 grains mild chloride of mercury was given. 3:50 large emesis. 4 p. m. stomach was washed out. 5:10 p. m. S. S. enema returned with gas and small amount feces. Pulse irregular. Slept 40 minutes. 9 p. m. S. S. enema returned clear with gas. Large emesis. Voided 2 ounces urine. 11:35 p. m. and 11:45 large emesis. At midnight her temperature was 100.4 F., rectal. Respiration 24, pulse 114. Cascara sagrada 1 ounce and milk of magnesia l ounce was given at a single dose. 2:30 fecal vomitus. 5 a. m. S. S. enema returned clear. 5:15 a.m. 1 ounce cascara sagrada, I ounce milk of magnesia was repeated. 6 a. m. fecal vomitus. 7:15 a. m. S. S. enema returned with some gas.

Realizing that we had a paralysis of the intestines to deal with, and the stomach would permit nothing to pass into the duodenum, I decided to leave the stomach free from medication. 7:25 a. m. her temperature was 98. F., pulse 108, respiration 29.

Patient was growing weaker and gradually losing ground. Having been very careful in returning the intestines to the abdomen, I concluded it was impossible to have produced a volvulus, and attributed the trouble to paralytic ileus. I considered reopening the abdomen, and also considered doing a enterostomy, but did not do so because her people objected. This proved a favorable procedure for the patient.

I felt the patient should have more fluid, and gave her a hypodermoclysis of 1000 c.c. normal salt solution; also ordered a nutritive enema of egg albumen, beef extract and milk, to be given every 4 hours.

The chart shows that from 7:25 a. m., January 3rd until 7 a. m., January 4th, her temperature remained normal, pulse running from 84 to 116, respiration 20 to 26. Fecal vomiting continued at about 30 minutes to 1 hour intervals. I was encouraged by the temperature. She was permitted to have small quantities of hot tea, or cocoa, when wanted. Of course all fluids taken were returned with the vomitus.

We charted the frequency of her pains, the chart readings of pain recurrence were as follows: 9:17, 10:35, 11:45, 12:00, 12:15, 1:15, 1:55, 3:05, 4:20, 4:35, 4:55, 5:00. At 5:45 a. m., Saturday morning, January 4th, she was men-

struating. 7:00 a. m. temperature 99.2 F., pulse 116, respiration 22.

At this time the abdominal distension was very great, and the patient did not receive any relief from pain except by the use of opiates. We might be criticised for the use of morphine in such a condition, but it was absolutely necessary to alleviate the intense suffering, and we were without heroin or codeine. Hot water bottles and turpentine stupes did not seem to give relief.

From this time until 9:15 p. m., January 5th, there was no change in her condition, excepting that she grew weaker, and there was gradual accumulation of gas. The vomitus were very foul smelling, very frequent, and pain almost unbearable. The pituitrin had been given intramuscularly; I decided to try a dose intraveniously. This was given with very unsatisfactory results. Patient immediately went into collapse, and it was necessary to use artificial respiration and stimulate to resuscitate her. I would recommend this method only in selected cases, as I feel that it is dangerous. I could not see any effects on the bowels, only that it created a desire to go to stool. Some flatus and mucus passed. We were getting very slight results from our glycerine enemas. We were giving nutritive enemas between the glycerine enemas.

At 9:15 p. m., Saturday, January 5th, she expelled her nutritive enema, and with it a large free liquid stool. At 9:30 p. m. a large liquid stool. At 10:55 p. m., large liquid stool with one very hard fecal lump. Pain continued. Slept 45 minutes. Large stool, slept 35 minutes.

At 2:15 a. m., January 6th, she feels tired and weak, slept 1 hour and 40 minutes; 4:30 a. m. voided four ounces urine; 5:35 a. m. one very large hard lump of fecal matter passed; feels rested. During the day of January 6th bowel movements were about every 30 minutes, consisting of liquid stool and hard feces. She was able to retain orange-albumen, beef juice and broth. Temperature 98.2 F., respiration 18, pulse 104. Urine during this time had contained traces of albumen, heavy deposits of phosphates and urates; scattered blood corpuscles; no cells or casts. Specific gravity 1032.

Tuesday, January 7th, temperature 99.2 F., pulse 100, respiration 20. Quite restless. We were pushing fluids, adding bicarbonate of soda to all water taken.

Wednesday, January 8th, patient was hungry. Ate cereal, egg. toast and tea. Passed 3 soft formed stools. Temperature 98 F., pulse 96, respiration 20. Urine negative. Passed 47 ounces in past 24 hours. Our elimination was good.

From this time on it is needless to report further; she was able to take food and enjoy it; her bowels became regular. She was free from

pain, all distension had left abdomen and she went on to an uninterrupted recovery.

In looking over literature on this subject I am led to believe that many surgeons lean toward excessive medication in handling ileus cases; we overdo in the matter. Since the above I have had two acute ileus cases. In each there was paralysis of the bowels. My treatment was simple and effective.

I gave small doses of codeine and morphine for the pain, washed the stomach a few times. About one glycerine enema a day. Pushed fluids by practoclysis and hypodermoclysis. Each terminated nicely after 4 or 5 days.

I believe that when we have a paralytic ileus, the paralysis will remain from 4 to 6 days regardless of what we may do. We wear our patients out with medicatin.

I cannot say that I have seen any good from physostigmine and pituitrin. I do not believe that we have any drug in the Materia Medica that will make a paralyzed gut functionate. We may continue administering these drugs, and if our patient rally, and the bowels move after so many days, we may give the medication credit; however, we will get better results, and with less wear and tear on our patients, by keeping them comfortable and letting old Mother Nature have time to overcome the paralysis that has been produced.

If reporting this case will tend to lend our profession to less medication, and to exercise patience in these cases, I shall feel amply repaid for my efforts in preparing this paper.

118 East Grand Ave.

The American Academy of Ophthalmology and Oto-Laryngology-The twenty-fifth annual meeting of the American Academy of Ophthalmology and Oto-Laryngology will be held in Kansas City, Mo., October 14, 15, 16, 1920, at the Hotel Muehlebach. The local members of the Academy and their friends are making arrangements to give all those who attend a pleasant time. Physicians engaged in these specialties are cordially invited to attend. This association was born in Kansas City twenty-five years ago, thus it is a fitting occasion that its silver anniversary should be celebrated here. The officers are as follows: Dr. Lee Masten Francis, president, Buffalo, N. Y.; Dr. Hal Foster, first vicepresident, Kansas City, Mo.; Dr. William E. Bruner, second vice-president, Cleveland, Ohio; Dr. Robert C. Lynch, third vice-president. New Orleans, La.; Dr. Secord H. Large, treasurer, Cleveland, Ohio; Dr. Luther C. Peter, secretary, Philadelphia, Pa.

Colic, first thing, inject coffee; strong decoction freely, and give to drink hot, repeated draughts, speedy cure.



New Born Babies in Newspapers—New born babies in Central and Eastern Europe are wrapped in newspapers when discharged from maternity hospitals, because no infant clothing is available. This condition is responsible for a special appeal from the American Red Cross to its chapters to resume production of garments, particularly layettes. Chapter production on a wartime scale is not contemplated. Even workrooms are not considered necessary but chapter women will be encouraged to meet with their neighbors for work in the homes. The disease, destitution and starvation in Europe show that garments for grownups and babies must be supplied, if progress in aiding these nations to resume normal life is to continue. Wartime standards are not strictly necessary in the making of the garments. Any serviceable material and simple style can be used.

An American School of Medicine in Paris— The project for the establishment of an American school of medicine in Paris is expected to take definite shape at a meeting soon to be held in the office of Mr. Charles F. Beach, an American lawyer in Paris. Besides a number of laymen, Doctor Tuffier, of the Academy of Medicine; Doctor Dehelly, Dr. Alexis Carrel, Dr. Edmond Burnet, of the Pasteur Institute, and several other noted physicians and surgeons have been invited. The particular importance of the proposed institution lies in the fact that the stream of American physicians and medical students who, for years, went annually to Berlin, Vienna, and other Central European cities for postgraduate work and research, will be diverted to Paris. The new school is to be under the joint direction of Americans and Frenchmen, and only post-graduates will be received as students. The French medical experts are as enthusiastic over the project as are their American confreres. Some of them admit that the existing Paris medical schools, as at present organized, are not fitted to the needs of Americans. Some of the methods in use are described by practitioners as antiquated. For instance, students are required to pay, in some cases, as much as 1600 francs for the publication of their theses. In the new institution, it is intended to do away with such costly items. At the same time, Americans attending the new school will be able to take advantage of the excellent facilities provided by existing clinics and research institutes.-Dr. B. Sherwood-Dunn in American Jour. Clin. Medicine.

Catalase Content of Blood in Anemia—According to E. B. Krumbhaar and John H. Musser, Jr., Philadelphia (Journal A. M. A., July 10, 1920), the catalase content of the blood varies according to the concentration of red blood cells, and this ratio is not materially affected by splenectomy or by the various types of anemia studied.

Cure of Pancreatic Fistula by Roentgen Ray
—Two cases of pancreatic fistula under Robert
M. Culler's observation (Journal A. M. A., July 3,
1920), have permanently closed after treatment
by the roentgen ray. They are reported for the
information of those likely to encounter such
conditions. No attempt is made to explain this
action of radio-activity, which was used in these
cases in the purest empiric manner. If the application of the roentgen ray inhibits pancreatic
secretion, the reason for the favorable outcome
in both cases is plain.

Red Cross Emergency Surgical Dressings Parcel—A standard emergency surgical dressings parcel, to be produced by Red Cross chapters, and to be kept by them in quantities sufficient to meet readily whatever emergencies each chapter feels may be expected, has been adopted by the American Red Cross. It has been officially endorsed by the Surgeon General of the army, the American College of Surgeons, the Surgical Section of the American Medical Association and the Conference Board of Physicians in Industrial Practice. A manual of instructions for the preparation and production of the parcels has been issued to the chapters, and supplies will also be sent them. The parcel is wrapped in heavy brown paper, sterilized and paraffined, and contains 10 gauze compresses, 1 absorbent pad, 1 rolled wadding bandage, 1 muslin bandage, 1 gauze bandage, 1 trianugular bandage and safety pin.

Industrial Research Laboratories in America —A bulletin just issued by the National Research Council lists more than three hundred laboratories maintained by industrial concerns in America, in which fundamental scientific research is carried on. The bulletin gives a brief account of the personnel, special equipment and particular kind of research carried on in each of the laboratories listed. Industrial research laboratories have increased notably in number and activity, both in America and Great Britain, since the beginning of the war, because of the lesson vividly taught by the war emergency. It was only by a swift development of scientific processes that the Allies and America were able to put themselves in a position first to withstand and then to win a victory over Germany's science-backed armies and submarines. And it is only by a similar and further development that America and the Allies can win over Germany in the economic war-afterwar, now being silently but vigorously waged.

Beat the Mother to Cure the Child-Among the Rumanian peasants, and particularly among the gypsies, there is a superstition that the death of a child is caused by an evil spirit having entered the body of the mother, and that beating the mother will drive out the devil and cure the child. Consequently these peasant mothers beat themselves frightfully when one of their children is ill. Recently a doctor attached to the American Red Cross commission was called to see a Rumanian gypsy woman. She lay on a thin straw mat on the bare ground, with nothing but a tattered tent to shelter her from the cold wind. He found that she was suffering from pneumonia, but he also noticed numerous bruises on her chest, and upon inquiry was informed through an interpreter that one of her children had died two weeks earlier. The superstition is common among the peasant folks of Rumania, and the Junior Red Cross has been carrying on a little educational propaganda on its own account to eradicate this and similar beliefs. In numerous instances, the self-inflicted chastisement has led to permanent disability. Death has been known to result from the beating. The ignorant men folk of the villages are as eager to throw the blame on the devil as the women themselves.

Training Starts in Hospital — A vocational unit has been established by the Federal Board for Vocational Education at the Government Hospital for the Insane, St. Elizabeth's, Washington, D. C., and at Manhattan State Hospital, New York City. This is a radical change in the handling of psychoses. Formerly, a psychotic patient was discharged as socially cured when he no longer presented a-social or anti-social symptoms in hospital environment. He was then returned to the very environment in which his psychosis developed, dependent on his family for support, and with no definite, productive employment. It is needless to add that frequently a relapse speedily followed. The plan of the Federal Board is to start a man's vocational training while he is still under treatment in a hospital, continue this training in a training center under proper supervision, and return him to his home, not only with a trade, but with a job which will render him economically independent and stimulate him with the hope thus engendered. It is firmly believed that more often than not, the adjustment to social environment will remain permanent. Should the results obtained by these units be encouraging, similar units will be started in all hospitals caring for a sufficient number of ex-service men with nervous and mental disorContinuing "The Medical Fortnightly and Laboratory News."

The Medical Herald

and Electro-Therapist

Incorporating the

kansas City Medical Index=Lancet

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Vol. XXXIX

AUGUST 15, 1920

No. 8



The Death of Dr. L. J. Dandurant

On the evening of the first of August, at 8:30 p. m., Dr. L. J. Dandurant, wife and two children, accompanied by two other people, driving along the road between Bean Lake and the Missouri river, on account of the road having been washed away, caused the doctor's limousine to drop into the river, while all were seated in the closed car. The car fell into water 22 feet deep, the doctor and his little son, aged 7, were drowned and the other four occupants were saved. At the present writing the doctor's body has not been recovered, while his son's body was found floating in the Missouri river about 12 miles below Atchison, August 4th.

This catastrophe has been a great shock to the medical profession, among whom he was a special favorite. He has always been an active member of our medical society and this year served as its president.

Dr. L. J. Dandurant was born on March 2, 1875, in St. Joseph, Mo. He graduated from the medical department of the University of New York in 1898. He possessed the degrees of A. B. and A. M. as well as an L. L. D. conferred on him by the Christian Brothers College at St. Louis, Mo.

In 1910 he was married to Miss Cecile A. Buddy of St. Joseph, and they had two children. The son was seven years old, while he left a daughter aged two.

He was an energetic and conscientious practitioner of medicine, also being a fellow of the College of Surgeons. He was an active member of our Board of Health for several years, and as the presiding officer of the Buchanan Medical



DR. L. J. DANDURANT

Society for the year 1920, he was always faithful to his duties. As a citizen he was high minded and progressive, taking part in everything concerning our city or its citizens, and during the war volunteered his services to the government and entered the army. Professional and civic work had undermined his health and last year he spent some time recuperating in Colorado. His ambition was greater than his strength permitted, but at the time of his death he was as active as ever. The short span of life allowed to any man to do his work in the world proves that we can only pick up the work of our predecessors and pass it on in a little improved form to our successors, and thus we are only the links of an endless chain of thinking, working indiprime of his life, at the high tide of his endeavors, and this is to be regretted.

The tragic death of the doctor and his son must fall heaviest upon his wife, but she has the satisfaction of knowing that he died high in the esteem of his fellowmen, having lived up to his duties as a man, a father and a husband. P. I. L. More cannot be said of any man.

A special meeting of the Buchanan County Medical Society was held August 9, 1920, at 8 o'clock p. m., at the Commerce Club rooms, to receive the report of committee appointed by First Vice-President H. S. Conrad to prepare resolutions of respect on the death of its president. Dr. Louis J. Dandurant.

The committee, P. I. Leonard, C. R. Woodson and A. L. Gray, presented the following:

Whereas. The members of the Buchanan County Medical Society have heard the sad news of the shocking death of Dr. Louis J. Dandurant and of his little son, on the evening of the first of August, 1920,

Therefore. Be it resolved, that the members of the Buchanan County Medical Society can not express in words their profound feeling at this unfortunate and overwhelming catastrophe to one of their members, taken in the prime of life, depriving us of one of our most energetic and conscientious members, while our community suffers the loss of a man who has devoted his life to the alleviation of suffering and the preservation of the health of our fellow citizens. He was an enthusiastic physician, a student and constant reader of new scientific methods of practice and identified with every movement for the improvement of the people and the profession. As a citizen he took a lively interest in all the affairs of men and during the war he did his "bit" by entering the army. His loss will be greatly felt in our community where he has practiced so many years, while the profession and the people feel deeply grieved at the passing of this good man.

The members of the Buchanan County Medical Society give this expression of their deep sympathy at the loss of the doctor's son and assure the wife that we share with her the irremediable loss of husband and son. Of Dr. Dandurant it can be truthfully said "well done, good and faithful servant."

His record is more enduring than one of marble, for it is written on the hearts and the lives of men and will endure for all time. On the face of the cliffs of time we will chisel the name of Dr Louis J. Dandurant and beneath it inscribe the humble tribute, "He gave aid and comfort to his fellowmen."

> You may break, you may shatter, The vase if you will, But the scent of the roses. Will cling 'round it still."

Practice of Medicine in Constantinople

Medical relief work in the Near East presents many vexatious problems. The "Acorne," official organ of the Near East Relief in Constantinople, devotes space in each number, to a discussion of these difficulties, in order that physicians in one district may learn how their prob-

Dr. Dandurant was removed in the lems were solved by relief workers in another. Dr. John W. O'Meara, graduate of Harvard Medical College, and formerly of Worcester, Mass., wrote in the last number of the Acorne:

> 'Judging by those seen in clinic and hospital, I should say that more than half the people in the Caesarea district have roundworms. Santonin, said to be a reliable vermifuge, I have found worthless (using it in doses up to five grains, repeated two and three times). In a dozen instances at abdominal operations, I have seen intestines lined with the parasites, containing thirty to fifty at least, yet when full doses of this vermifuge were given later, and usually repeated, each time the details of a well recommended routine being carefully observed, not more than three or four worms have been obtained. In the clinic, where therapeutic details have to be left to the patient, results are even more discouraging. I am trying to get hold of a better drug than Santonin.

'For favus, the natives here shave the heads and paint on a thick layer of pitch, which is removed in one piece, preferably under anesthesia, in from ten to fifteen days. The idea is to have the hair grow into the pitch and be removed with it. It seems good in theory, but thus far I have not made sufficient experiments with the treatment to judge as to its efficacy."

Near East relief workers say that one of the great handicaps in the medical relief work is the native doctor. He usually refuses to perform operations, leaving it to the barbers as in days of old. Infections of the worst sort result, and nurses with the organization are kept busy caring for the ills developed from "barber operations."

Gaucher's Disease—The case of Gaucher's disease reported by S. W. Sappington, Philadelphia (Journal A. M. A., July 10, 1920), is the twentyfifth on record in which the diagnosis has been established by histologic examination. The patient was 50 years of age, the oldest recorded. Some positive staining reactions were obtained with concentrated Herxheimer's solutions of scarlet R and sudan III. The significance of these results, however, is not clear.

Botulism From Canned Beets-In the outbreak of botulism reported by W. G. Randell, Florence, Ariz. (Journal A. M. A., July 3, 1920), the food at fault was undoubtedly commercially canned beets in tin containers, as they were the only article of food eaten by all of those who died. The other canned foods-corn, hominy and string beans-were all thoroughly cooked after being taken from the can; but the beets were taken from the can and served with a little vinegar poured over them. One person did not eat any of the beets. He was unaffected and is well today. Four persons who ate the beets died.



GENITO-URINARY DISEASES AND SYPHILIS—By Henry H. Morton, M. D., F. A. C. S., Clinical Professor of Genito-Urinary Diseases in the Long Island College Hospital: Genito-Urinary Surgeon to the Long Island and Kfings County Hospitals, etc. Fourth edition, revised and enlarged with 330 illustrations and 36 full page colored plates. Published by C. V. Mosby Co., St. Louis, 1918.

The fourth edition of Morton's Genito-Urinary Diseases and Syphilis has been brought up to date and has now become an exhaustive work on diseases in the specialties of which it treats. Certain procedures that have been perfected, or made more available, since the previous edition. They include the high frequency current in benign bladder tumors, the use of radium in carcinoma of the bladder and prostate. Much space is given to advanced work on syphilis, both regarding laboratory and clinical methods. The book is well gotten out and rich in plates and illustrations, many from the author's own cases. On the whole the book is of real value.

ARTERIOSCLEROSIS AND HYPERTENSION—With chapters on Blood Pressure. By Louis M. Warfield, A. B., M. D., F. A. C. P. Formerly Professor of Clinical Medicine, Marquette University: Chief Physician to Milwaukee County Hospital, etc., etc. Third edition. Cloth, 265 pages. Illustrated. Publishers: C. V. Mosby Co., St. Louis. Price, \$4.00 net.

This volume concerns itself with subjects which are of immediate concern to every practitioner without regard to the special line of work which he may be doing. Rapid strides have been made since the beginning but a few years ago, and we yet lack considerable of having reached the fullness of information. However, Warfield keeps us abreast with what is doing, no other is better fitted to present the subject to us. Because of a lapse of several years since the appearance of the second edition, this, the third, has been largely rewritten and includes much which is new, a careful survey of the literature has been made and careful discrimination used in selection. The author tells us in his preface that "Much that is written on the subject is of little value." We can all agree with him. It is always refreshing to read after a man who is so patently master of his subject, the personal element in this volume is one of its strong points. The text throughout reflects the able man and thorough student. In this edition two new chapters have been added—Cardiac Irregularities Associated with Arteriosclerosis, and Blood Pressure in Its Clinical Application. Each adds greatly to the practical value of the volume. T. A. H.

SYMPTOMS OF VISCERAL DISEASE, A STUDY OF THE VEGETATIVE NERVOUS SYSTEM IN ITS RELATIONSHIP TO CLINICAL MEDICINE—By Dr. Francis M. Pottenger, Professor of Diseases of the Chest, University of Southern California, Los Angeles. C. V. Mosby Company, Publishers, St. Louis, 1919, 328 pages.

The author has undertaken a very difficut task, and has succeeded better than might be anticipated in reducing to a system what might well be termed

gropings today in the field of medicine, viz., to harmonize and systematize precise deductions resulting from reflexes arising from the vegetative nervous system and formulate etiologic factors therefrom either with or without endocrinologic relations. Some reflexes may be traced to a certain originating point with fair accuracy, but when complicated as are some nerve storms with many conflicting elements or sources of irritation or generalized by say a supervening toxemia, the problem is perplexing. A master of tuberculosis the writer has reached that sublime pinnacle not attained by all specialists, that no organ may be studied in isolation, the problem is the patient who has the disease, not vice versa. Therefore the patient is to be studied from all possible viewpoints. While the reviewer does not agree with the explanation of the origin of all reflexes, specially those of the cervical vertebra, he acknowledges the wisdom of the outlined philosophy. Time and further study must decide the interpretation of visceral pathology to a nicety. There is still some wisdom in the surgeons' slogan, "let us go in and see what the trouble is." The work is vast in its scope and will live historically as a leader in this difficult field of biology. It impels one to admit the broadness of medical problems and to consider the body as a unit, therefore the weight of pathologic features apparently remote from the recognized field of disability. illustrations are both diagramatic and clinical and assist much in grasping the subject matter. It is commended to all doctors who are still students.

J. M. B.

SYPHILIS—A Treatise on Etiology, Pathology, Diagnosis, Prognosis, Prophylaxis and Treatment. By Henry H. Hazen, A. B., M. D., Professor of Dermatology and Syphilology, Medical Department of Georgetown University and at Howard University, etc. With 160 illustrations, a number of which are in colors. Cloth, 637 pages. Publishers: C. V. Mosby Co., St. Louis. Price, \$7.00 net.

Dr. Hazen's treatise has met with merited recognition, being acknowledged and accepted by various faculties as a text preeminently suited for use in schools which are exacting in their demands. The larger part of the volume was written by Prof. Hazen himself. He has gathered together a wealth of information and presented it in a form which is pleasingly effective, his style is direct and conversational and the reader feels himself directly addressed. The subject is covered in its every phase, and from the very latest viewpoint. The author has availed himself of a wonderful wealth of reference and has given a bibliography at the end of each chapter. He has delegated the consideration of certain phases of the subject to men who are recognized as authorities, chapters in the volume coming from Major M. A. Reasoner, Dr. H. A. Fowler, Dr. John Dunlop, Dr. John Lind, Dr. W. H. Hough, Drs. Virginius Dabney and L. H. Green, Col. Chas. F. Craig, Dr. Jay F. Schamberg and Dr. Walter Van Sweringen. Acknowledgement is also made of assistance from Drs. Reede. Fordyce, MacKee and Sutton. Seldom have we been privileged to read a volume so complete in every detail and so happy in style. The subject is one in which illustration plays an important part in both selection and execution. The work has been splendidly done. T. A. H.

A well written and profusely illustrated publication, Nephritic Notes, has just been issued by Reed and Carnrick of New Jersey. While it is primarily intended to call attention to nephritin as a therapeutic agent, it will pay any doctor to study the illustrations and read the booklet through. Nephritin has value, it has come to stay.

NOTE—The Medical Herald's Kansas City office will supply any book reviewed in this department at publisher's price, prepaid. If an order for two books be sent at any one time, the purchaser will be entitled to a six months' subscription to the Herald. This plan is arranged for the convenience of our readers, and we trust it will stimulate trade in the direction of good books.—Editor.

This is a small book with short descriptions of the various kinds of insanity. The first chapter gives the classification now accepted for use in the War Department and recommended for general adoption throughout the United States. The author has a clear way of writing, and for the scope that this book is intended, it is thoroughly worthy. It is well illustrated.

INFORMATION FOR THE TUBERCULOUS—By F. W. Wittich, A. M., M. D., Instructor in Medicine and Physician in Charge of Tuberculosis Dispensary, University of Minnesota, etc. 150 pages. Published by C. V. Mosby Co., St. Louis, Mo. Price, \$1.00.

This book is written by a man who fought the white plague in his own person. He gives good advice and much useful information, and instills fresh hope. It is well to have such a book in the hands of any patient. The author mentions, among other points, diet, rest and exercise, use of tuberculin, drugs, surgery of pulmonary tuberculosis, cautions to be observed, tuberculosis and the war, finally concluding with a definition of terms regarding information for the tuberculous.

THE ITINERARY OF A BREAKFAST—A popular Account of the Travels of a Breakfast Through the Food Tube and of the Ten Gates and Several Stations Through Which It Passes, also of the Obstacles which it Sometimes Meets. B. J. H. Kellogg, M. D., Medical Director of Battle Creek Sanitarium. 210 pages, illustrated. Published by Funk & Wagnalls Co., 354 Fourth Avenue, New York. Price, \$1.69, net.

This clever author describes the physiology of digestion, and by means of a series of colored plates shows the course of a day's meals through the alimentary tract. His knowledge of digestion is unsurpassed and he tells it in a fascinating way. He advocates three bowel evacuations a day as the proper and natural method, with which we agree. Constipation is one of the great ills of the day and we must teach our patients how to avoid it. He advocates vegetables and nuts as a proper diet. An excellent book for your constipated patients, and one which you may conscientiously recommend to them.

HANDBOOK OF PULMONARY TUBERCULOSIS: Its Diagnosis, Prognosis, Prevention and Treatment—By Jefferson Demetrius Gibson, M. D., Denver, Colorado. The Denver Scientific Publishing Company, Denver, Colorado. Price, \$4.00.

The book is a handy volume consisting of 130 pages, twenty-four roentenograms of the chest before and after treatment and six other illustrations. Chapter I is devoted to the bacteriology of tuberculosis and the theory of the modus operandi of the destruction of the bacillus within the tissues, the toxins eliminated and the tissues rehabilitated. Chapter II is devoted to the anatomy, histology and physiology of normal lungs. In Chapter III the author describes the pathological changes in the lungs and fluids of the body, methods of infection and natural and artificial immunity. At the close of the chapter the author says, "I expect to prove that the wonderful power stowed up in roentgen radiation is able to control tubercular infection as easily and successfully as any streptococcic and pneumococcic vaccine will relieve streptococcic and pneumococcic conditions. This ability of x-ray to control many of the most desperate cases of tubercular infection, even of acute miliary form of the disease, proves the correctness of the above declaration, and the carrying out of this assertion to its logical conclusion is the cause of the publication of this little volume." Chapter IV is devoted

MENTAL DISEASES—A handbook dealing with Diagnosis and Classification. By Walter Vose Gulisk, M. D., Assistant Superintendent Western State Hospital, Fort Stellacoon, Wash. Illustrated. Published by C. V. Mosby Co, St. Louis, Mo. Price, \$2.00. nition of the disease, the assistance rendered by the x-ray and other methods are discussed. In chapter V prophylaxis and the duties of the individual, city, county and state are dealt with. The author states that every child infected with tuberculosis should be treated by the x-ray. The balance of the book is devoted to the dietetic, hygienic, medicinal and electric treatment of the disease. How complications should be met, etc., and finally the technic whereby he cures tuberculosis. The author has probably made more painstaking investigation into the effects of x-ray upon the lungs than any other physician, but his conclusions have not been verified by a sufficient number of investigators to make them a settled matter in therapeutics. The volume reflects almost a life work on this important subject and it is deserving the consideration of every member of the medical profession.

> THE SURGICAL CLINICS OF CHICAGO—Volume III, Number 1 (February, 1919). Octavo of 236 pages, 75 illustrations. Philadelphia and London: W. B. Saunders Company, 1919. Published bi-monthly. Price, per year, paper, 410 and 1918. \$10.00; eloth, \$14.00.

> This number is full of good things. The clinics are too numerous to list here. There are numerous excellent illustrations. Simpson, Cook County, gives a most interesting clinic on the use of radium in cancer with three illustrative cases. One remarkable case is reported of cure of cancer of base of tongue and epiglottis. Other clinics are by Bevan, Hagar, Beck and other Chicago surgeons. War surgery is represented by two contributions, one from Major Kellogg Speed, Medical Corps U. S. Army, and one from Lieut. Col. Frederick A. Bailey, France. This is a good number of "The Clinics."

> ELECTRICITY IN MEDICINE—By George W. Jacoby, M. D., Former President of the New York Neurological Society and of the American Neurological Association, and J. Ralph Jacoby, A. B., M. D., Fellow of the New York Academy of Medicine, Chief of Clinic, Neurological Department, Lepox Hill Hospital, etc., with illustrations, P. Blakiston's Son & Co., Philadelphia, Price, \$5,00.

A splendidly complete work for the doctor, in that it considers the subject from all phases. It discusses first the philosophy of electricity and follows the electron theory. The various forms of current are then fully presented, the apparatus needed for each and many mechanical schemes for illustrating the same. Methods of applying the currents with dosage are outlined. One-half the volume is devoted to the application of electricity in treating disease. method of treatment is given, results expected, electric diagnosis and prognosis. When we realize the extent to which electricity has become a feature of medical practice; that results may be obtained which otherwise were impossible; that many cases are relieved more rapidly than by other means; that it has gained a degree of popularity with a large class of invalids, it behooves those who have neglected this field to post up, to inform themselves not only of the modus operandi but of the apparatus best calculated to give certain results. This work of Jacoby is sufficiently voluminous to enable one to master the subject in all its detail, yet not unpleasantly massive as to deter one from attempting the task. The ground work of the volume has been taken from that most popular and efficient System of Physiologic Therapeutics edited by S. Solis Cohen of Philadelphia, which appeared in 1901. Since that time so many changes in nomenclature and methods have followed as to demand a rewriting of the whole subject- and the volume herein presented has attained that end most beautifully and masterly.

J. M. B.



DOPING THE BABY TO SLEEP

A social survey conducted by the Interchurch World Movement has revealed the fact that young mothers in India have a most unique method of keeping their babies quiet. It seems that opium is inserted beneath the infant's thumb nail, so that, when the inevitable process of sucking this member beging, the little one will imbibe enough of the drug to guarantee a long period of quiet slumber—for the child and for its parents as well. One can picture the Indian madonna, crooning a lullaby to her drowsy kiddy:

"Twilight is fading and soft shadows creep, Beckoning good little babies to sleep— Starlight is gleaming, and bright is the moon; You will be drifting to Poppyland soon.

Now is the time for the sandman to come. Hush-a-bye, baby, and suck on your thumb.

"Don't cry, my little one; bedtime is due. We will not need soothing syrup for you. Roseate dreams will envelope you when You nestle down in your opium den.

Rock-a-bye, baby, upon the tree-top—Daddy has brought you a sweet shot of hop."—R. E. Sherwood in Life.

OUR COUNTRY DOCTOR

You'll know him by his muddy shoes, His clothes of last year's style: The weary look about him, The sweetness of his smile.

You'll know him when the school's let out, And see the children flock To catch a cheery word from him, And shout their "Hello, Doc!"

You'll know him, too, at midnight,
When he rides through sleet and rain,
And wades deep in a swollen stream,
To reach your bed of pain.

You'll know him in the dawning, Still sitting by your bed In damp clothes—oh, so patient— His hand upon your head.

He was never in a hurry,
When a kindly word could cheer;
And the little jokes he saved for you
Are memories most dear.

He didn't fall in Flanders Field, Where crimson poppies grew: He wore himself out waiting On folks like me and you.

He had no cross in Flanders Field, 'Mid poppies' crimson hue:
The cross is in the aching hearts
Of folks like me and you

-- Mary M. Hopkins.

WHO IS MY FRIEND?

Who is my friend? It is he to whom
I may go when my skies are drear—
Who when hope is low and my heart is sad.
Will give me a word of cheer—
—He is my friend.

Who is my friend? It is he who comes
With the light of love in his face
And shares my joy with a heart that is glad
If I win in life's pretty race—
—He is my friend.

Who is my friend? It is he whose load
I am honored to help him bear,
When he's weak and faint and his road lies dark
In the shadows of dumb despair—
—He is my friend.

Who is my friend? It is he, when Fate
Has blessed him with fortune, or fame,
Will accept my poor tears of joy and know
They are free from base envy's shame—
—He is my friend.

Who is my friend? It is he whose hand Clasps mine when the lights grow dim— Who would go with me on the long, long trail As I gladly would go with him—

He is my friend.Boston Post.

A LEGEND OF THE BLESSED VIRGIN

Jno. Boyle O'Reilly

The day of Joseph's marriage unto Mary
In thoughtful mood he said unto his wife,
"Behold, I go into a far-off country
To labor for thee. and to make thy life
And home all sweet and peaceful." And the Virgin
Unquestioning beheld her spouse depart:
Then lived she many days of musing gladness,
Not knowing that God's hand was round her heart.

And dreaming thus one day within her chamber
She wept with speechless bliss, when lo! the face
Of white-winged angel Gabriel rose before her,
And bowing, spoke: "Hail! Mary, full of grace
The Lord is with thee, and among the nations
Forever blessed is thy chosen name."
The angel vanished, and the Lord's high Presence
With untold glory to the Virgin came.

A season passed of joy unknown to mortals,
When Joseph came with what his toil had won.
And broke the brooding ecstasy of Mary.
Whose soul was ever with her promised Son.
But nature's jealous fears encircled Joseph
And round his heart in darkening doubts held sway.
He looked upon his spouse cold-eyed, and pondered
How he could put her from his sight away.

And once, when moody thus within his garden
The gentle girl besought for some ripe fruit
That hung beyond her reach, the old man answered,
With face averted, harshly to her suit:
"I will not serve thee woman! Thou hast wronged me:
I heed no more thy words and actions mild;
If fruit thou wantest thou canst henceforth ask it
From him, the father of thy unborn child!"

But ere the words had root within her hearing
The Virgin's face was glorified anew;
And Joseph, turning, sank within her presence
And knew indeed his wondrous dreams were true.
For there, before the sandaled feet of Mary
The kingly tree had bowed its top, and she
Had pulled and eaten from its prostrate branches
As if unconscious of the mystery.



A GROUP OF OMAHA HOSPITALS

Organized at Council Bluffs, Iowa, September 27, 1888. Objects: "The objects of this society shall be to foster, advance and disseminate medical knowledge; to uphold and maintain the dignity of the profession; and to encourage social and harmonious relations within its ranks."—Constitution.





THE MEDICAL SOCIETY OF THE MISSOURI VALLEY

Annual Meeting at Omaha, Neb., Monday and Tuesday, Sept. 6-7, 1920.

OFFICERS

CHARLES RYAN Des Moines President.

PAUL GARDNER New Hampton, Ia. First Vice-President.

FLOYD H. SPENCER......St. Joseph Second Vice-President. O. C. GEBHART......St. Joseph Treasurer. CHAS. WOOD FASSETT....Kansas City Secretary.

JOHN P. LORD...........Omaha Chairman Arrangement Committee.

OMAHA MEETING OF THE MEDICAL SOCIETY OF THE MISSOURI VALLEY

The thirty-third annual meeting will be held in Omaha, Monday and Tuesday, September 6-7, under the auspices of the Omaha-Douglas County Medical Society. Dr. Charles Ryan of Des Moines, Iowa, president. Hotel Fontenelle will. as usual, be headquarters and meeting place, and the annual dinner will be given at six o'clock Monday evening to which all members and their ladies are invited. Following the dinner, Dr. Karl Albert Mever of Cook County Hospital, Chicago, will deliver the surgical oration, his title being "Ulcer Cure Following Gastric and Duodenal Perforation." On Tuesday, a luncheon will be given in the Indian Room of Hotel Fontenelle where the members will be the guests of the Omaha medical profession. By way of diversion, our members have been invited to attend a ceremonial of the "Ak-Sar-Ben," guests of the Fall Festivities Association on Monday evening after adjournment. This will be a novel entertainment which no one should miss. It will take place in the "Ak-Sar-Ben" den.

Arrangements are in the hands of a capable committee, as follows: Dr. John P. Lord, chairman; W. H. Pruner, R. W. Bliss, L. B. Bushman.

Committee on Banquet: Max Emmert, Edwin Davis, O. E. Liston.

Ladies' Committee: Mesdames J. B. Potts,

A. D. Dunn, F. E. Coulter, Irving Cutter, H. von W. Schulte.

All members are cordially urged to attend this meeting and to bring a friend. If you have had no vacation this summer, take the trip to Omaha and enjoy an outing in the society of the best fellows on earth, and enjoy a sojourn in one of the most beautiful and hospitable cities of the Missouri Valley. Come prepared to discuss the papers and do your part in the good work, which is now before the medical profession of the country. If you have not reserved your room at Hotel Fontenelle, do so today or you may be disappointed.

Following is the preliminary program:

Dr. B. Langdon, Des Moines, Iowa, "Operative Delivery in Obstetrics with Demonstrations by Moving Pictures and Lantern Slides."

Dr. S. Grover Burnett, Kansas City, "The Treatment of Epilepsy—a Thirty Year Report."

Dr. John W. Martin, Des Moines, Iowa, "Bone Surgery."

Dr. C. C. Conover, Kansas City, "Intestinal Stasis."
Dr. O. C. Morrison, Carroll, Iowa, title unannonced.
Dr. Tom Bently Throckmorton, Des Moines, Iowa,

"Hemionopia as an Early Symptom of Brain Tumor."
Dr. Arthur L. Smith, Lincoln, Neb., "The Value of

a Complete Examination Before Local Therapy."
Dr. T. G. Orr, Kansas City, "Traumatic Ossifying Myositis."

Dr. Frank B. Young, Gering, Neb., "The Acute Surgical Abdomen, With Case Reports."

(Continued on page 214)



Omaha Welcomes the Missouri Valley Medical Society

The "Gate City of the West," as Nebraska's metropolis has been called, stands on a height overlooking the Missouri river and commands the entrance to a vast inland empire stretching 1 500 miles westward.

Here begins the great overland route first used by the Indians, and then by the stream of immigrants who traveled to Oregon and California by stage coach, pony express, and ox team. Today Omaha is the fourth railroad center of the United States, and the half-way station on the New York-San Francisco aerial mail. Through it passes' the Lincoln Highway, the great automobile route across the continent, and many other national or interstate highways.

No city of its size conducts a greater volume of business. Its manufactures, particularly those based on agriculture, have had a remarkable growth. It leads the United States in the production of creamery butter and has the largest macaroni factory in the country. It is the second corn and live stock market in the world.

Although Nebraska itself yields no metals, one of the largest refining smelters in the world is located in Omaha; here the great trunk lines bring in from the western states, and even from Mexico and British Columbia, their daily toll of many hundreds of tons of ores, while other lines carry the refined metals to the east.

Fine public buildings, hospitals, libraries, and art galleries, and a score of parks, connected by a boulevard system 35 miles long, are among the city's many attractions. Omaha is the seat of the military headquarters of the Deartment of the Missouri, and at Fort Omaha, within the city limits, is located the chief balloon school of the United States. No city of the Missouri valley can boast of a more progressive and harmonious medical profession.

The city is named from the Omaha tribe of Indians, a branch of the Dakotas. Although a trading station had previously been established, it was not till 1854 that a treaty was concluded with the Indians whereby the land was surren-



CHARLES RYAN, M. D.
President Medical Society of the Missouri Valley
1919-1920

dered to the white men. Omaha then became the capital of Nebraska territory, but in 1867, after Nebraska became a state, the capital was removed to Lincoln. Omaha was one of the first large cities to adopt the commission form of government. Population about 200,000.

(Continued on page 214)



Illustration furnished by Chamber of Commerce.

THE MEDICAL SOCIETY OF THE MISSOURI VALLEY

HOTEL FONTENELLE, HEADQUARTERS AND MEETING PLACE

Eighteenth and Douglas Streets, OMAHA, NEB., SEPTEMBER 6-7, 1920



Be one of the many who will make their early reservations and be assured proper accommodations.

See the elaborate commercial exhibit on mezzanine.

Efficient personal service and strict attention given your every need.
Excellent Cuisine and Moderate Price Lunch Room in connection, under our management.

A. W. NOLET, Manager.

To the Members of the Medical Society of the Missouri Valley.

Dear Doctor:

Just a notice—important too, we believe—that we will be represented with our very interesting line of

HIGH CLASS EYE—EAR—NOSE—THROAT FRAASS INSTRUMENTS

at the meeting of the MEDICAL SOCIETY MISSOURI VALLEY at OMAHA, NEB., on September 6-7, A. C. in SPACE No. 1, at the Hotel FONTENELLE.

DON'T FORGET TO LOOK US UP! IT WILL BE WELL WORTH WHILE FOR YOU.

Awaiting the pleasure of personally meeting you, we remain,

Sincerely yours,

AUG. S. FRAASS COMPANY, Inc.

REMEMBER!

FRAASS—SPACE No. 1
(near elevator)
HOTEL FONTENELLE
September 6-7, A. C.



MY TEMPLE

By Guy Bogart

My library is a holy temple, Each book a living entity Whose soul communes with me In comradeship sweet and simple.

The hours I sit therein Intent on opened page Of saint and sage Pure worship to me have been.

My temple is builded of books-Each a needed part And in each a throbbing heart-Secure in favored nooks.

Doctors, somehow, have always been associated in my mind with books and with the making of books. But they are seldom bookish. Perhaps my old home life had much to do with my impressions. My father (the late Dr. G. Henri Bogart) was ever surrounded by books and when not delving into medical lore or human service was engaged in writing.

Then came the childhood excursions into Cincinnati, where the venerable and loving physician, Dr. William Colby Cooper, divided his busy years among the tasks of editing the "Medical Gleaner," teaching in the medical schools, writing books and keeping up a successful general practice. He found time to take me into his big heart, to present me with copies of his books and to treat me as an equal. It was at this time that I looked with awe into the face of Dr. John Uri Lloyd. I had looked into the puzzling pages of abstruse volumes on chemistry and medical treatment from the pen of this great wizard of the laboratory. And this was the man who gave us "Stringtown on the Pike," and "Etidorpha."

Of the great midwestern trio of Poets—Riley. Cooper and James Newton Matthews, all but the first were physicians. Dr. Matthews was one of America's truly great singers.

One of the most welcome visitors to my little study has ever been Ethel Lynn, M. D. From her pen has come a stream of hopeful writing, and I would feel that a distinct loss to my library if her volume, "A Woman Hobo," were removed.

Dr. Holmes—and so on great and small—it would take many, many pages to detail the men of medicine who have contributed so widely and so knowingly to the literary activities of every age.

This creative fervor is but natural, for who sees life from so many angles as the physician, or sees it with so full and deep a sympathy as the healer?

Jesus the Christ was "the great physician" in more than a figurative and a spiritual sense. for he brought with him and practiced the healing of the body.

Few doctors but find time, in addition to keeping up with the great amount of professional literature, for specialization in some recreative field and to know the cream of good literature. ancient and modern. This catholicity of appreciative browsing has helped to make the doctor a man of affairs and an asset to the community in which he lives. He must be learned without being academic. From his rich experiences has come a marvelous gain to the archives of the world's temples of learning.

ANNUAL MEETING OF THE MEDICAL SOCIETY OF THE MISSOURI VALLEY

(Continued from page 210)

Dr. Oscar M. Gilbert, Boulder, Colo., "Symptoms Tuberculosis."

Dr. Francis M. Callum, Kansas City, "Diverticulum vs. Physical Signs in the Diagnosis of Pulmonary

of the Bladder with Stones."
Dr. John W. Shuman, Sioux City, Iowa, "Dwarfism and Giantism." (A case report of each.)

Dr. Lynne B. Greene, Kansas City, "The Scope of

Ultra Violet Rays in Dermatology."
Dr. W. E. Wolcott, Omaha, "The Diagnosis and Treatment of Weak and Flat Feet."

Dr. Newell Jones, Omaha, "Urinary Infections in Early Life."

Dr. Louis E. Moon, Omaha, "Local Anesthesia in the Treatment of Rectal and Anal Diseases.

Dr. W. E. Wolcott, Omaha, "Treatment of Flat Foot, Whitman Method." (Illustrated by moving pictures.)

List of exhibitors on the mezzanine:

Abbott Laboratory, Chicago, booth Nos. 4 and 5.

A. S. Aloe, St. Louis, booth No. 3.

H. G. Fischer Co., Chicago, booth No. 14. Aug. E. Fraass Co., New York, booth No. 1.

Magnuson X-Ray Co., Omaha, booth No. 13. H. A. Metz Co., New York, booth No. 11.

Radium Chem. Co., Pittsburg and Chicago, space

Sharp & Smith, Chicago, No. 10.

OMAHA WELCOMES THE MISSOURI VALLEY MEDICAL SOCIETY

(Continued from page 211)

Omaha's Hospitals

Hospital
36th and Cuming Sts.
38th and Farnam Sts.
40th and Poppleton Ave.
Park and Dewey Aves.
10th and Castellar
21st and Dewey Ave.
25th and Douglas Sts.
34th and Meredith Ave.
25th and Harney Sts.

DROPSY

Indications:
Dropsy of any origin,
Bright's Disease,
Valvular
Diseases,
Heart Trouble
following Influenza, Cirrhosis,

Anasarca.

This is an advertisement of our sole product, into which we put all our efforts to produce as nearly a perfect remedy as possible, for just two of the many ailments of humanity which you are called upon to treat.

DROPSY AND HEART DISEASE

ANEDEMIN doesn't always relieve even these, but it will give you a better result in a greater number of cases than any other remedy, and do it without danger to your patient and with no bad after-effects It has no cumulative action and produces no stomach disturbance; is a powerful diuretic without irritating.

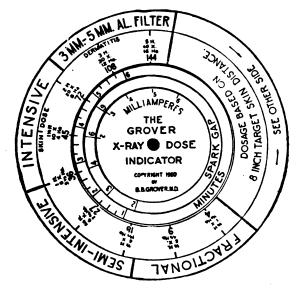
Sample, literature with formula to physicians.

ANEDEMIN CHEMICAL COMPANY, Chattanooga, Tenn., U. S. A.

An	edemin	Che	mical
	Compa	ıy, I	nc.
Ch	attanoo	ga, ′	Γenn.
Send	sample	and	booklet

Name	M.	D.
City		••••
0		

THE GROVER X-RAY DOSE INDICATOR



(The setting shown in the above illustration is the proper one for the administration of a skin dose: Spark gap 6, mill. 2. minutes 3%=45.)

A device for the translation of the different methods of ascertaining an x-ray dose. Many methods of measuring the quantity of x-rays are employed;; Holz-knecht and Hampson pastiles; Keinbock's strips of sensitized paper; Sabouraud and Noire tint tablets and many others.

Carrying in mind all the various methods is confusing, and one must do it in order to read x-ray literature intelligently.

The Grover indicator will eliminate these difficulties at once. Not only is the translation of the units of chromatic methods into milliampre minutes easily accomplished, but it shows how to set the machine to secure any dose desired. It indicates how to make settings for fractional, semi-intensive and intensive treatments and when to employ a filter.

Manufactured of finest quality celluloid. Will last a lifetime.

Full instructions for use accompany each indicator. Price \$3.00 by registered mail. Address The Medical Herald and Electro-Therapist, 536 Ridge Building, Kansas City, Missouri.

Doctor, if you receive a copy of the Medical Herald and are not a subscriber, please take it as a cordial invitation to remit a dollar and receive our magazine for the year 1920. Turn to advertising page 68 and note the feast of "Good Things to Come" in the early issues of the Medical Herald.

Tongaline exerts a manifest action on the nervous system of the secreting order of glands, it diminishes the uric acid content of the blood, and produces a substitutive irritation in the region of the articular surfaces. On account of the exaggerated vasomotor action of Tongaline, the irritation drives the uric acid deposits toward the emunctories, causing a great secretion of bile in the liver, an abundant diuresis in the kidneys and a serous diarrhea in the intestines, while in the urine we find a great quantity of uric acid.

How Do You Treat Ulceration?

Since ulceration depends for its occurrence upon LOCAL INFLAMMA-TION, and because persistence of local inflammation prevents the clearing up of such conditions, the most rational treatment is DIONOL. The clinical results that follow its use justify and prove the claims made for it.

VARICOSE ULCER

Dr. W. W. writes: I wish to report a case of Varicose ulcer of one year's standing that I cured with Dionol in the period of three weeks. I consider this remarkable.

INFECTED WOUND

Dr. I. H. I. writes: Dionol has given me great results in a case of infection due to a puncture of the hand with scissors. The wound was discharging pus freely and the arm was inflamed to the elbow, but Dionol entirely cleared it up in 3 or 4 days.

Send for literature, case reports, samples, etc.

THE DIONOL COMPANY

864 Woodward Ave., Detroit, Mich. (Dept. 27)



Retention Headaches—Every doctor has cases in which there are recurrent attacks of severe, blinding headaches, often of obscure origin, but associated with all the symptoms of toxemia. The practical man thinks first of a thorough cleanout, and of course this is absolutely essential. A few doses of calomel, podophyllin and bilein, with a morning dose of Abbott's Saline Laxative, answer this purpose beautifully. However, this method of treatment may well be supplemented by securing the elimination of body waste through the urinary tract. The most powerful stimulant of the nitrogen-carrying excreta through this tract is probably cinchophen, long recognized as a "specific" for goutiness and various rheumatic affections. Put your patient who suffers from chronic headaches under a course of treatment with chinchophen, Abbott, giving one 71/2 grain tablet four times daily, with an abundance of water. Watch results and report.

Sharp Pain and its Relief—There are times when an acute condition is of such a painful character that the application of heat and other simple agents, is without avail, and the physician is forced to resort to an anodyne of prompt and definite power. Hypodermic injections have such a marked advantage by reason of their psychical effect that with most physicians they are a measure of last resort. In cases of

this character where prompt and lasting relief must be given in a severely painful condition, Papine (Battle) is of much value. Not only is it effective as an anodyne, but its use guards the patient from the evil effect of the hypodermic. Furthermore, owing to its well balanced formula of carefully chosen agents, it does not produce the evil after-effects so prone to follow extemporaneously prepared mixtures containing opiates. As an anodyne Papine may be fully relied upon.

An Efficient Palatable Cascara—To have at your disposal a cascara preparation that is really palatable. and that represents at the same time all of the laxative constituents of the drug with the exception of the bitter principle, is "a consummation devoutly to be wished." A prescription for Cascara Evacuant will bring to your patient just such a preparation. method of removing the bitter principle, it may be noted, is original and exclusive with Parke, Davis & Co. In the preparation of the so-called "aromatic" cascaras, alkalies, which are ordinarily used to destroy the bitter glucoside (as directed by the Pharmacopoeia), seem to injure some of the other laxative constituents of the bark. Cascara Evacuant, on the other hand, represents the entire therapeutic virtue of cascara minus the bitter principle, which is removed by an ingenious chemical process that leaves the rest of the drug unaltered. This explains why the manufacturers do not need to add purgatives to this palatable preparation to make it efficacious. In chronic constipation divided doses of Cascara Evacuantabout twenty drops t. i. d., before meals and at bedtime--will induce regular evacuations without griping. Gradually the dose should be decreased as a regular stool habit is restored.

The
Management
of an
Infant's Diet

A Temporary Diet Summer Diarrhea

Mellin's Food . . . 4 level tablespoonfuls
Water (boiled, then cooled) 16 fluidounces
To be given in small amounts at frequent intervals.

Each ounce of this mixture has a food value of 6.2 Calories and furnishes immediately available nutrition well suited to spare the bodyprotein, to prevent a rapid loss of weight, to resist the activity of putrefactive bacteria, and to favor a retention of fluids and salts in the body tissues.

MELLIN'S FOOD COMPANY.

BOSTON, MASS.

Two factors operating at this time, the one dependent on the other, combine to create added interest in smallpox vaccine virus. There are more smallpox susceptibles now than at any time during the vaccination era. Smallpox for the past year and a half has been very materially on the increase throughout the world. If epidemics are to be checked and immunity against this disease maintained at a high point, more attention must be paid to vaccination and revaccination. This can only be accomplished expeditiously by a safe and potent vaccine virus. The Lilly product is said to yield in primary vaccination a maximum percentage of "takes" when proper cold storage conditions have been observed.

A Sedative for Children-In choosing a sedative for use in children, one must be careful not to employ powerful agents that exert too potent an effect and produce depression. In nervous irritability in children or in any other condition where sedation is required, the phylician will find in Pasadyne (Daniel) a soothing agent of definite effect and one which will not leave in its wake any distressing after effects. While of distinct therapeutic power, Pasadyne does not depress or disturb the functions. It is this combination of effectiveness and safety that has made Pasadyne an agent of more than ordinary worth and secured for it the confidence of many careful clin-Pasadyne is merely a concentrated tinctpre of passiflora incarnata. A sample bottle may be had by addressing the laboratory of John B. Daniel, Inc., Atlanta, Georgia.

Hot Weather Coryzas—The chief endeavor of most individuals during the summer is to keep cool at any cost, and in seeking the relaxation of so-called vaca-

tions, they all too often ignore the laws of physical well-being, and expose themselves to the consequences of overcrowding, bad ventilation and general neglect of personal hygiene. The present day abnormal conditions of overcrowding, moreover, whether one goes to a vacation resort or not, are more apt to expose the majority of people to germ infection than ever before, and bring about a general lowering of bodily vitality. Summer coryzas, for instance, are very prevalent. They are persistent, and frequently decidedly virulent, often directly exciting or predisposing to serious after-affections of the nose, throat, ear and lungs. Primarily, the cause of the trouble is direct bacterial infection, either through the oral and nasal passages, or occasionally from the ear structures. "Sore throat," varying in intensity; more or less nasal obstruction due to congestion and discharge; and acute and subacute aural affections may all result from indifferent care and uncleanliness when the vitality of the body is impaired as above shown. It is apparent, therefore, that the one great factor in warding off summer coryzas and their sequelae is constant and thorough cleanliness of the oral, pharyngeal, nasal and auditory passages. Dioxogen has been found of exceptional value for these purposes because of its bland and soothing antiseptic character. Used several times daily in proper dilution, as a routine means of cleansing the nose and throat, it not only mechanically softens, dissolves and dislodges thickened, viscid mucus, but through its powerful germicidal action rapidly destroys the bacteria present. Congestion and irritation of the mucous membrane are promptly allayed, and the tissues restored to their normal condition. Dioxogen is odorless and colorless; it can be used as often as may be necessary and it is totally free from all toxic

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AUTOGENOUS VACCINES A Specialty

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or deleterious action. As a thoroughly reliable prophylactic against infection, its efficiency has been repeatedly demonstrated. Recognizing, therefore, its notable value in the treatment and prophylaxis of nose and throat infections, many medical men make it a practice of recommending that a bottle of Dioxogen be carried in the grip of every vacationist. They have found that its presence and use have not only saved many a summer holiday from being spoiled, but have been the means of so promptly overcoming the average case of summer coryza that those afflicted have been able to return from their vacations, free from all danger of conveying or spreading their infection to those at home.

It is unfortunate in some respects that adherence to the code of ethics prevents, in many instances, physicians from giving endorsement to meritorious products which have stood the test of time and trial. A physician in writing to the makers of Pil Mixed Treatment (Chicester) recently expressed his opinion of the product in the following words. "I have not been one of those who have been led astray by the, to my mind, somewhat extravagant claims made for arsenic in the treatment of syphilis. I use arsenical products just as I use the Wassermann reaction, but I am not willing to confine my therapeutic agents merely to arsenic in the general run of syphilitic cases. I have had too good results in the past from the use of mixed treatment and my experience and observation have taught me that in many cases, at least, mercury and iodine cannot be dispensed with altogether. I doubt very much if there is any shortcut to results in the treatment of syphilis. Hence, I expect to used mixed treatment in the majority of cases and for this purpose, I use Pil Mixed Treatment

(Chicester) because it is the most convenient, dependable and satisfactory combination that I have found. I use it not because I cannot write a prescription to be filled by the druggist, but simply because I have found by experience that the preparation referred to is always uniform, always active and that it can be used in sufficient dosage to secure maximum results in each individual case without causing irritation or the several unpleasant conditions which are apt to follow the use of mercury and iodine when pushed in such cases." The above was not written for publication, but offers a good example of the regard with which this product is held by many physicians who have used it. It should at least encourage physicians who have not yet become acquainted with the preparation, to write for a sample and to subject it to the acid test of actual trial. Samples and literature will be gladly sent to any physicians on request, by the Hillside Chemical Company, Newburgh, New

Jaundice Accompanying Pregnancy — Frequently the pregnant female suffers from obstinate constipation and torpid liver. Chionia administered regularly during pregnancy will relieve hepatic pain, nausea and vomiting and overcome the lethargy of the bowel. Many a women owes an easy and uneventful labor to the stimulating effect of Chionia on the hepatic functions, especially the detoxicating power of the liver.

Chronic Alcoholism—"In cases of chronic alcoholism," says Dr. T. E. Corrigan, "I prescribe Peacock's Bromides, for I find this preparation is more efficient in the same size dose than any other, and it is far less irritating to the stomach.

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																	ampule
0.3	gram.														.85	per	ampule
0.4	gram.														1.00	per	ampule
0.5	gram.														1.25	per	ampule
0.6	gram.														1.50	per	ampule

NEOSALVARSAN

(NEOARSPHENAMINE-METZ)

Dosage	I,	0.15	gram	\$0.75	per	ampule
Dosage	II,	0.3	gram	1.00	per	ampule
Dosage	III,	0.45	gram	1.25	per	ampule
Dosage	IV,	0.6	gram	1.50	per	ampule
Dosage	V.	0.75	gram	1.75	per	ampule
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Announcements

Hepatic Torpor—"I find Chiona the very best remedy in cases of hepatic torpor," says Dr. E. L. Goodall.

Hay Fever—Doctor, consult your 'own interests. Cure the hay fever. See page 190, and send for a "Perfection."

"Good Things to Come"—Be sure to read the list of original articles shortly to appear in this magazine. You will find a widely varied list of interesting topics. See adv. page 68.

For Goitre—Doctor, you should try the special goitre tablets put up by the Columbus Pharmacal Co., Columbus, O. One trial will convince you. See announcement in this issue.

Intravenous Medication—If you wish to give your patients the benefit of the latest, up-to-date treatment for anemia, syphilis, and skin diseases, write for clinical data to the New York Intravenous Laboratories. 110 East 23rd street, New York City. See announcement on page 59, advertising department of this issue.

A New Bevorage—Grape Ola is a natural fruit beverage full of body, strength and flavor and containing all the constructive and curative properties of ripe grapes. A sample of Grape Ola Concentrate sufficient to make 7 or 8 glasses of Grape Ola will be mailed to any physician on receipt of 25 cents to cover cost of mailing.





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Systematic Development of X-Ray Plates and Films—By Dr. Lehman Wendell. Illustrated. \$2.00 postpaid. Supplied by the Medical Herald and Electro-Therapist, Kansas City, Mo.

Pulmonary Tuberculosis, Diagnosis, Prognosis, Prevention and Treatment—By Dr. J. D. Gibson, Denver, Colo. Illustrated. Just out. \$4.00. Supplied by the Medical Herald and Electro-Therapist, Kansas City, Mo.

Bathing Girls—Just out. Pretty, modest and fascinating pictures for the doctor's sanctum. Fifty cents each; five pictures, all different poses, for \$2.00. Address Art Department The Medical Herald, Kansas City, Mo.

For Sale—Unused Edwards No. 3 x-ray portable coil, tube, holder and flouroscope; fine for dental, hip and bone work; also high frequency and diatherma current; only \$100. Address Dr. E. B. Carney, Fort Scott, Kansas.

Principles and Practice of Roentgenological Technique—By Dr. I. Seth Hirsch, New York City. 260 pages, 348 illustrations. Just out. Cloth, \$10 net, postpoid. Supplied by the Medical Herald and Electro-Therapist, Kansas City, Mo.

"Poems the Doctor Should Know"—16 pages, 45 poems of war, love and patriotism, including the immortal poem, "In Flanders' Fields," by McCrae, and several answers to its challenge. Price 10 cents a copy, three for 25 cents. The Medical Herald, Ridge Building, Kansas City, Mo.

Doctor, if you receive a copy of the Medical Herald and are not a subscriber, please take it as a cordial invitation to remit a dollar and receive our magazine for the year 1920. Turn to advertising page 68 and note the feast of "Good Things To Come" in the early issues of the Medical Herald.

Want to Buy a Chair or Electrical Equipment?—Doctor, have you something to sell or exchange? Do you want a location or an assistant? Are you looking for new opportunities? Use and read this column. Ads two cents a word. Remittance should accompany order. Address Bargain Department Column, The Medical Herald.

New Sex Book—A practical, common sease, plainspoken little book on the sexual functions, by Mary Ware Dennett. Price, 25c, postpaid. Address Book Department, Medical Herald, Kansas City, Mo.

Pituitrin injected intramuscularly or intravenously is life-saving in some cases of post-operative "ileus."

Diverticulosis of the sigmoid, adherent to the bladder (peridiverticulitis) may manifest itself chiefly by urinary symptoms; the urine, however, is clear unless the lesion perferates into the bladder.

A Dependable Eliminant—In the treatment of neurasthenia, jaundice, chlorosis, rheumatism, rheumatic gout, stomatitis and pyorrhea, Prunoids has no superior as a dependable means of assuring proper intestinal elimination. Prunoids act solely by promoting physiologic processes. One to two Prunoids at night will be found an effective dosage.

Increased Mileage for Your Automobile—Many eastern doctors are using "Kick" in their gasoline with gratifying results. Here are a few reports: "I have used your product known as 'Kick' and find that it contains nothing injurious to the mechanical parts of any automobile or internal combustion motor in which it may be used." L. W. "I have used 'Kick' according to your instructions. Have tested it out in Ford car. I got 221/4 miles out of plain gasoline and with the treated gasoline I received 33½ miles to the gallon, and can say it is all you claim it to be." W. C. "I gave your 'Kick' a test as per your instructions and can give you a very encouraging report. We tested it in a Ford 1919 model and got over five miles more with 'Kick' than without it."-F. J. C. "Kick" is guaranteed to be free from injurious material. money-back guarantee with every can. Try it and you will never be without a can in your car. "Kick" equals gasoline at 21/2 cents a gallon. Manufactured only by the American Automobile Accessories Co., Cincinnati, O. Price per can (32 liquid ounces), \$2.00.

SURGEONS AND PHYSICIANS

The American Journal of Clinical Medicine—Chicago, Ill.: I wish to say a few words relative to Soluble Iodine, made by the Iodum-Miller Co., of Kansas City, Mo. I notice you carry the advertisement of this company in your excellent journal. I have used this preparation of iodine for the last decade extensively in my surgical work, and find it so valuable as to regard it almost a necessity. Applied locally, it does not harden or stain the integument as does the ordinary tincture; yet it penetrates to a much greater depth. I use it in preparing the field and also as an after dressing. It makes a good substitute for rubber gloves, where one wighes to retain the acute sense of touch.—B. E. Dawson, A. M., M. D., Kansas City, Mo.

The Medical Herald and Electro = Therapist The Kansas City Medical Index-Laucet An Independent Monthly Magazine

Vol. XXXIX.

SEPTEMBER 15, 1920

No. 9



HOW TO CURE TUBERCULOSIS*

JEFFERSON DEMETRIUS GIBSON, M. D., Denver.

Pulmonary tuberculosis is an infection or septic inflammation of the lungs and other tissues in the chest. It may be acute or chronic within itself, or a pure phthisis: may have a great many different complications engrafted upon it. Many of these complications will render the disease much more serious than a pure tubercular infection. In fact many physicians minimize a pure tubercular condition and attribute most all of the dangers of tuberculosis to complications of other infections: so I want to impress upon you this evening the great importance of complications, and warn you of the absolute necessity of controlling these complications to be able to cure the tubercular process. In doing this I do not wish to minimize the dangers from the real pure cultures of ordinary tuberculosis that has gained a lodgment in the lung tissues of the individual.

In this paper I will not dwell upon all of the complications, because most of you physicians know how to handle and care for the majority of these conditions, and will only speak on a few of them as a means to demonstrate more clearly my main ideas in a real tubercular condition.

The most frequent complication we come in contact with in pulmonary tuberculosis is what is known as the mixed infections, or pus-forming microbes, either single or in combinations making a pathological entity in complication with the tubercular bacilli. While there is no doubt in normal lungs these microbes may exist and be not pathological; while many authors think they frequently lead only a saprophytic life in the debris of the bacilli, yet we know from vast clinical experience that they are capable of increasing temperature, increasing expectoration by producing chills, night sweats and increasing a

*Read before the Western School of Electro-Therapy, Kansas City, Mo., May 25, 1920. loss of weight, vitality and many other untoward symptoms in tubercular cases.

Again we have still more severe forms of complications where we have a real pneumonia, either lobar or bronchial variety engrafted upon cases of ordinary tuberculosis. These pneumonic conditions involving a whole lobe, two or three lobes, as beautifully demonstrated in skiagrams Nos. 16 and 19. These cases are exceedingly serious, and a vast majority of them ordinarily fail to recover and die as "galloping consumption" or "ulcerated tuberculosis."

I could enumerate many other complications, but time forbids; and these cases are sufficient for our purpose.

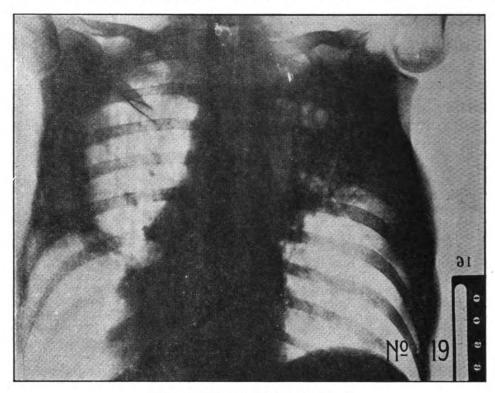
We will take an acute ulcerated case of tuberculosis, such as seen and so beautifully demonstrated in skiagram No. 19, before treatment, as our text for this evening's paper; and from this standpoint I will discuss all phases of the most serious class of pulmonary tuberculosis. I have especially chosen this class of cases, as it brings to your eyes at once cases in which action has to take place or the patient dies quickly. I have for that reason taken also this class as it demonstrates to you what can be accomplished in this class of cases, and therefore it will not be so necessary to impress upon your mind what can be done in the early cases of tuberculosis.

This patient reached Denver, coming direct to me in spite of the protest of two or three of her home physicians who predicted that she would be dead before she could reach Denver, and was an absolutely hopeless case at the best. She was in an extremely precarious condition upon her arrival. She was rushed in a wheel chair to the nearest hotel, put to bed and given stimulants. Her temperature was 104½ in the early morning; she was having two chills a day; temperature in the afternoons running to 105; pulse exceedingly weak and fast; respiration very rapid; and the physical examination disclosed complete consolidation of the upper lobe of the right lung with a large cavity in the upper apex; and the lower lobes filled with millions of small disseminated tubercles like grains of wheat or millet seeds; and the upper lobe of the left lung was infiltrated; and the whole lobe can be marked out in the skiagram from tubercular markings and infiltrations of the lobe itself. Patient only weighed 70 pounds. Her age was 32, the mother of five children, the youngest 7 or 8 months old, from which the mother dated her present illness.

When we look at this slide it demonstrates very clearly the seriousness of the case before us. The upper lobe of this right lung tells us very clearly when we look at it, the microbes are winning a great victory ,and their "onrush" into the tissues is nothing less than frightful, the defenses of the patient are absolutely smashed;

Weakened blood vessels, choked lymph channels, distorted and filled alveoli and infundibli speak of impending ruin and disintegradation unless order is brought out of chaos. Can this be done? I say "yes, and successfully as a general procedure instead of the exception."

The first thing we must do in a case like this is bring order out of discord, aid Nature in bringing up reinforcements and organize our defensive powers that the onward rush of the victorious bacilli may be checked. In other words, Nature must be assisted so completely that she may re-



Skiagram No. 19-Before treatment.

there is nothing but toxin everywhere, and Nature is not able to produce the anti-toxin, immune bodies nor complements sufficient to control the situation, nor in this condition is the right leucocyte being produced. It is true that the polynuclears are in great abundance. In other words, the tissues you might say are all choked with them. You must remember that the polynuclears have no part in the fight against tuberculosis, but are a power especially for the pneumococcus infection. When you look at this picture it is no trouble to realize that the lung is absolutely disorganized. We know at once in a "mass involvement" like this that the alveoli cells, infundibuli, broncheols, and lymph channels are all filled with debris of dead and ruined cells, epithelial cells, polynuclear leucocytes, all disorganized and crowded into all spaces as exudates everywhere.

act and bring to bear enough "immune bodies," "co-ferments" and "complements" to neutralize all sensitized antigens in this great field of battle between the invaders and the defensive powers of the host. Opsonins must be produced in great quantities that may prepare these microbes for an easy prey for the leucocytes, and the leucocytes must be furnished and prepared in enormous quantities; the especial leucocytes that have the power of being able to engulf the tubercle bacilli wherever found, opsonized or probably without opsonin to a large extent.

I will say right here that up to the present time, and unless I can demonstrate to the contrary now, we have never had a positive definite specific agent in the treatment of endo-toxin infections; so follow me closely and watch my reasons, as I do not wish to make unreasonable claims; but I would not be doing my duty to you, to the medical profession, the state, and those suffering with tuberculosis if I did not talk to you plainly.

In the case in hand we have most every complication in the way of microbial infection, and in its worst forms that we can come in contact with; so the first thing that we think of in looking after this patient, after stimulants of strychnine, whiskey, digitalis, etc., are administered, milk and nourishment are prescribed as needed, cold ice towels to the head and absolute rest is enjoined, windows opened wide for the admission of plenty of fresh air; in other words, the ordinary routine of necessities attended to in the usual manner; then the next thing is to aid the patient to react for the production of "immune bodies," "ferments" and "complements." For this purpose in the patient as above described, I use as a first procedure some well known antistreptococcic serum, usually x ccs. at the dose; and instead of giving it hypodermically I use it by the rectum, introduced through a rubber tube several inches up the bowels, once in 24 hours, usually about bed time, just before the patient begins his nightly slumber. You remember this serum is supposed to contain large numbers of amboceptors as well as sensitized antigens from many strains of bacteria, and I think by this means we are able to get these sensitized antigens and also immune bodies rapidly into the circulation and without trauma to the patient; and also in a way in which his system is not shocked and thrown into confusion as is frequently done when used hypodermically. Also when used in this way we do not have to be quite so careful about anaphylaxis. This should be kept up once in twenty-four hours, if results are good, for six or eight doses, when patient may be allowed to rest for two or three days, when more can be given if needed. This, I think, is a decided help in controlling the great mass of infecting microbes. I find that the temperature begins to abate, the chills to be less severe and the sweats not so profuse. In other words, I find there seems to be a weakening of the microbic effect, but "be not deceived" for there is not one antigen in this polyvalent serum that will aid in the destruction of a single tubercle bacilli, but it will aid and help to control almost every other microbe likely to be found in this mass.

To this is added at once and as soon as possible, x-ray for its definite and specific power upon the normal and pathological tissues of the lungs. In a case like the one we are discussing, we cannot depend upon x-ray for its specific effects to control the heterogeneous mixture of microbes found in this condition. As narrated above the serum is used for this purpose, while the x-ray is reserved and used for its absolute power in controlling the tubercle bacilli.

- 1. The first effect that we have from x-ray as we pour it through this mass of infection, all through the lungs, is this: the inhibiting effect which is known and accepted as a fact by all radio therapists, is the inhibition of propagation of the microbes, not only tubercular microbes but all kinds of microbes.
- 2. The next effect of x-ray is probably an interference with the microbe ferments in their catalytic effect in breaking down the cells of the tissues in their preparation of food for the microbes.
- 3. The lessening of the vigor and vitality of the bacilli under the continued, steady treatment and bombarding effect of the x-ray.
- 4. X-ray ultimately causes death and elimination of the bacilli from the lung, and, of course, from the sputum.
- 5. When the bacilli are being eliminated and destroyed, the fibrosed areas and encapsuled tubercles must be liquified to aid in their removal and also for the release of the bacteria, so the special leucocytes may be able to attack and destroy them.

Next we have the effects of x-ray, as the treatments are continued regularly, as described later, upon the tissues and defenses of the patient

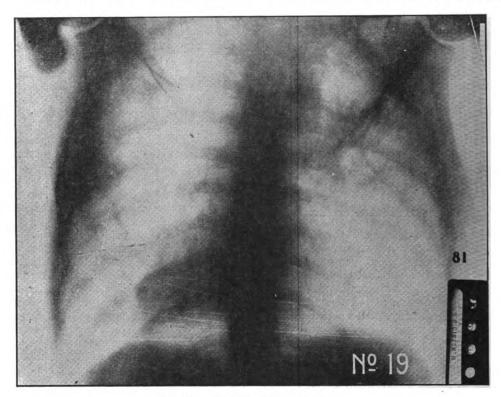
- 1. The first effect of all light to life and protoplasm is soothing, pleasing and stimulating; and we know that one of the mildest and most direct stimulations of the rays through the lung tissues in a new patient in their first treatment may be compared to the mildest sun-tanning effect; just the least stimulation taken down all through the lungs which is penetrated and must be penetrated by x-ray.
- 2. Another thing we must remember is that the thicker, more solid, and less air contained in the tissues, greater will be the resistance to the direct beams of the x-ray, and stronger will be the spangled disseminated secondary rays, which probably may be electrical, as they are lost or disseminated into these diseased cells.
- 3. We have what seems to be a "gripping, squeezing" effect produced by the x-rays as they pass through these tissues.
- 4. Under the continued regular bombarding of the rays, a weakening not only of the propagating powers of the bacilli, but under the continued "hammering" of the rays, there will be some weakened, innervated, death and destruction of a few of the bacilli at the start, and these will increase more and more as the treatments are continued.
- 5. There will be, under the continued treatment, an increase of opsonins and their negative and positive phases must not be lost sight of.
- 6. There will be produced as the mixed infections are more or less eliminated and the tubercular condition comes more or less to the

front, a great increase in the special leucocytes, the large mononuclear, which has the happy faculty of being able to engulf and digest the wax coated tubercular bacilli with impunity and eliminate it into the lymph and blood stream absolutely without harm to itself.

7. From the elimination into the lymph and blood streams of the tubercular toxin, or endotoxin we have the remains of the whole bacilli—the wax coating, the protein substance, fat, etc., thrown into the blood stream as antigens; and

toxin bacilli, how much does it lack of giving us a specific anti-body for the tubercle bacilli?

9. As these treatments progress and continue we have gradually produced a normal hyperaemia and healthy engorgement, you might say, of the blood up to and around the infected areas. This engorgement of the blood brings with it the opsonins, leucocytes, nourishment and pabulum to aid in the work of reconstruction, first, in the separation and division of the mass infections in commencing incapsulation and re-



Skiagram No. 19-After treatment.

this in a growing and increasing abundance, almost at the will or dictation of the physician in charge as to the amount.

8. As just noted the liquefied constituents of the whole bacilli in almost any quantity desired, when thrown into the blood stream produces the antigen, par excellence, in this tubercular condition. This antigen produced in great quantities never produced before in such quantities, compels the systemic condition to produce amboceptors, or immune bodies, for its especial neutralization. Therefore, from the abundance of autogenous antigens produced, have we not to meet these indications autogenous anti-endotoxins which are compelled to be formed to neutralize these autogenous antigens? being the case, if the autogenous anti-endo-toxin complemented is an absolute specific for the sensitized antigen, which in this case is the endoinvigoration of tissues around and in areas of infection.

10. This engorgement and revitalizing stimulation is such that almost every case of tubercular involvement can be made to clear up the debris and exudate and remove it from the alveoli, infundibuli, etc., and air restored into all of the alveoli, infundibuli, except in old calsified, hardened areas where fibrosis is complete in which there is no living microbe present.

11. In these "tubercular mass areas" or otherwise, a genuine "crepitant redux" can and will be produced bearing the same relation to the tissues that it does to the same tissues in a resolving croupous pneumonia.

Now, while I have been probably very prolix in going into the details of x-ray effects above, what has been the effect of the combinations upon the patient? I will stop here to only say

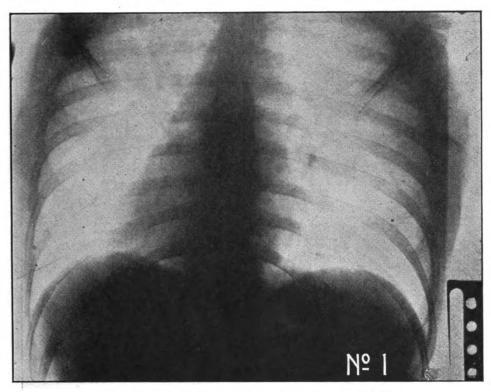
the general condition of the patient in every respect has gone "pari--passu" with the change in the physical condition.

Electricity

Electricity is the great "hand maiden" or adjuvant of x-ray in the treatment of tuberculosis. Many radio therapists think I exalt x-ray to the discredit of electricity. While I consider x-ray the keystone of the "specific arch," its supports are exceedingly important; and therefore I consider electricity an exceedingly important factor

fects that can be produced upon the patient at will. Its power of stimulating most all of the organs of the body through the pneumo-gastro and phrenic nerves, gives us a splendid agent for mechanical effects upon the heart, stomach, liver and diaphragm and lung tissues.

When we follow the pneumo-gastric, through its plexus in the regions of the hylus, and note the ramifications of these nerve fibres along the bronchial walls, through the broncheols, and into the very cell wall of the alveoli itself we know that it has the ability of contracting the muscular



Normal Lung-This should show all white, no mottling.

in the treatment of pulmonary tuberculosis, especially desperate cases of tuberculosis.

I do not mean electricity as a general term, but I mean expressively the static current not high frequency, galvanism nor just any old form of electricity. I will not be able to write as much on this subject as I would like to, because, as you know, whole volumes are written upon this one subject.

The static current is different from all other currents in that it is a direct current, in the first place, and it also has an excedingly high voltage with an exceedingly small amperage; and therefore, has practically no cataphoric effects that can disseminate or scatter products of infection. The effects of static electricity are, therefore, largely mechanical; and its great use in tuberculosis is its mechanical stimulation, sedative ef-

tissues and affecting the very capillary cells through the muscular tissues, therefore, in its contracting and squeezing effect it aids the liquefied debris of the infections to escape and drain through the puncta of the alveoli into the lymphatics or is forced out into the broncheols and eliminated by coughing. In other words, it aids markedly in the drainage and cleaning up of the lung tissues as nothing else can do. After the effects of the x-ray in these tissues, elimination and drainage are an equally important necessity for the well-being of the patient.

In the treatment of tuberculosis I prefer what is known ordinarily as the static brush discharge to the cervical and upper dorsal regions as a regular procedure. This, you see, brings a continuous shower of sparks over the nearest points accessible to the origin of the pneumo-gastric and phrenic nerves. Used in this manner it is the most splendid tonic we possess, aiding in katabolism as well as anabolism, improving the appetite, bettering their metabolism as a whole and usually invigorates the patient to an excellent degree.

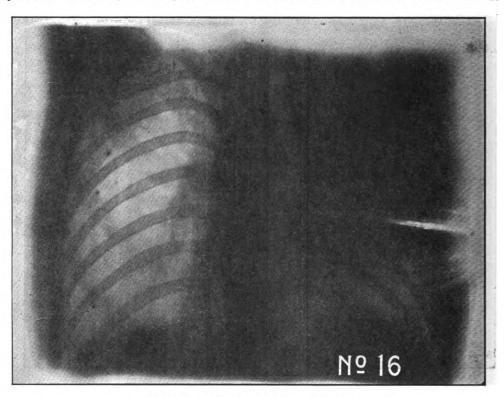
Some patients do not like the brush discharge, so with them the Morton Wave Current to the back of their neck, and sometimes over the solar plexus gives us splendid results.

Ozone O3

Ozone is the most maligned agent in the work of therapeutics. It is really amusing to read the

measure, and in serious and desperate cases, it should be pushed until it is made an absolute therapeutic measure.

3. Diet is of equal importance you might say to rest. No treatment, no rest will be of any avail unless it aids in the digestion of food. Nourishment is the axis around which must revolve all treatment. Many of these patients have an absolute repugnance for food, and it is sometimes exceedingly difficult to make them understand and realize they have no trouble with their stomach at all, and their stomach symptoms are only secondary; and not real diseases.



Skiagram No. 16-Before treatment.

anathemas pronounced upon it by many physicians, but despite all that has been said against it, when properly mixed with an oil nebula and regulated so that it is not disagreeable to the taste or smell, I find it beneficial in chronic tubercular coughs. Patients must be taught to watch for its irritating effects, and at the commencement of dry, irritating, uncomfortable sensations in the pharynx, they should stop the inhalation at once.

Now, Mr. President, the combinations that I bring before you at this time are as follows:

- 1. Get all the good for your patient you can out of medicines for the relief of symptomatic conditions.
- 2. Remember that rest for the weakened tubercular patients is an exceedingly important

- 4. Fresh air, if anything, is the most exaggerated agent of the treatment. Fresh air is so abundant and so free, it can be and ordinarily is obtained everywhere.
- Hygienic surroundings must be maintained.
- 6. Vaccines, autogenous or stock vaccines and serums can be used to control the complications in tuberculosis, and aid in the recovery to a remarkable degree.

These cardinal or hippocratean lines of procedure must ever be kept before us; and to these I add in the treatment of tuberculosis x-ray as follows:

X-Ray Treatment

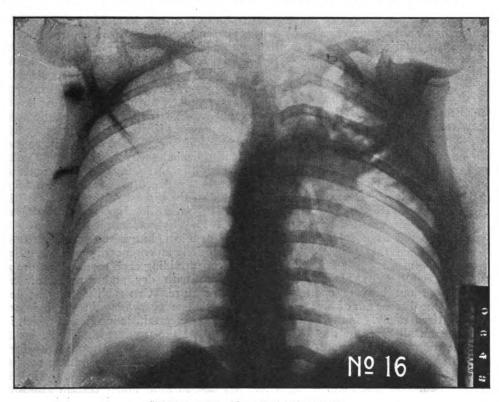
Place the patient upon the x-ray table, lying flat upon his back. Lead protective coverings

are placed over the head for the protection of the head and face, care being used with napkins, sufficiently thick, or something in the same way, to prevent sparking from the lead to the patient. The lower abdomen and gentals should be protected also. Aluminum screens of at least 2 mm in thickness are used for the protection of the chest and parts to be treated. The x-ray tube is then swung over the chest in a way as to get the rays scattered over the entire chest as much as possible, with the center of the focus usually near the center of the chest. Have the anode of the

given a week, that is on the lungs proper. That will leave three days upon which to give static electricity, or other forms of electricity to be used in conjunction with the treatment.

Electricity is given on alternate days with the x-ray described above for 10 to 15 minutes, usually until a slight perspiration is produced in the palms of the hands.

Also an inhalation of an ozonized oil nebula is given daily from 5 to 10 minutes, which not only acts as a tonic, but also is very efficacious frequently in controlling the cough.



Skiagram No. 16-After treatment.

tube from 12 to 14 inches distance from the patient, and put through the tube a current ranging from 1½ to 3 ma., owing to the size and thickness of the patient, using from 5 to 7 in. parallel spark gap. A Coolidge tube or the author's air cooled tube usually preferred. The seance should last usually ten minutes.

The light should be such that it will give you a slight illumination through the chest, but not enough for a first class fluoroscopic examination. We wish no fluoroscopic ray for treatment, as we wish the rays to be as dense as possible, so use no "cut-outs" as is sometimes done in fluoroscopic work.

My method is to give one entire treatment through the front of the chest and the next treatment, two days later, is given through the back of the chest. Three x-ray treatments are usually For several years this combination has been so exceedingly successful in my hands in treating tuberculosis that I can scarcely realize that it is a dangerous disease. I believe it is possible to relieve 95 per cent of all cases, all stages and all complications of pulmonary tuberculosis.

My claim, or rather a suggestion, of specific influences developed under the above described therapeutic measures for tuberculosis is based upon the following points:

1. The ability to enormously increase the large mononuclear leucocyte and other large

lymphocytes.

2. Through means of the large mananuclear leucocytes such great amounts of antigens composed of the whole bacilli are produced and thrown into the blood and lymph streams, compels the systemic powers of the patient to re-act

in a decided manner to take care of the great quantity of antigens eliminated; thus producing a special amboceptor to neutralize the great amount of endo-toxin antigen, which we will call an "auto-anti-endo-toxin."

- 3. The ability to eliminate fibrosed tissue and acute or chronic exudates as long as they harbor tubercle bacilli.
- 4. The power to eliminate tubercle bacilli from the lungs and sputum.
 - 5. Case incidence and case mortality.
- 6. Lantern slides to be shown you now demonstrating cases before and after treatment, I believe will prove the correctness of my conclusions, and demonstrate to you very clearly why I have hope in the final eradication of the dangers of tuberculosis.

430 Commonwealth Bldg.

ENGINEERING VS. TUBERCULOSIS F. C. WALSH, M. D., Kansas City, Mo.

If anything worth while, in regard to tuberculosis, can be thought, said or done, it should surely receive a hospitable reception at the hands of the medical profession primarily, and later by the thinking public at large. But, let it be said at the start, that in an effort to provide a new method of treatment, this method should not be received and considered as a sole method, but simply as an additional therapeutic weapon in battling a scourge whose ravages are not in the least receding to a condition of "innocuous desue-We started out bravely enough some years back to put the disease out of business. We meant well, but tired easily. Many of the profession still look on all cases of the disease as incurable, while the average layman, strange to say, is almost dangerously optimistic as regards a favorable outcome in the vast majority of cases. Both views are bad.—But the main point, after all, is that we must maintain an ever active interest in combating the disease, and be ever on the alert to grasp and master new weapons in order to successfully continue the battle. With this brief preliminary, let us proceed to the meat of our discourse, with a view to present our idea as briefly and clearly as possible.

In inception the idea dates back ten years. The experimental features were completed four years ago. Verbally, the method of treatment has been presented to over a hundred physicians, who have received it most favorably with but one or two exceptions. This plan of treating pulmonary tuberculosis was formulated for the purpose of treating those cases which needed favorable climate, but without forcing them to go far from home to seek it. In other words, figuratively speaking, favorable climate is brought to the patient. That is a revolutionary idea, and requires logical discussion on the one hand, and

an open and receptive mind on the other.

It is almost axiomatic with the profession the world over, firstly, that sanitarium treatment, regardless of anything else, but in conjunction with therapeutic and hygienic measures, is the most effective way of treating the tubercular patient. (There is no specific treatment, and probably never will be). Secondly, it is admitted by the profession at large that a favorable climate is a great advantage in treating the disease, or in placing the patient under favorable conditions for recovery. And by a favorable climate we always think of dryness, altitude and evenness of temperature, given here in the order of their importance. What then, constitutes a favorable climate for this disease? Primarily, a dry air: second, a rarefied air—which is another way of speaking of altitude; third, an air of even temperature. Given these three elements of favorable climate, no matter where or how produced. and we have a favorable climatic condition for the patient afflicted with pulmonary tuberculosis.

Admitting the above—and it cannot be logically denied-why not build a sanitarium in which the three favorable elements of climate can be produced and maintained, for the treatment of the disease in those parts of the country which Nature has not favored with such a climate? Why not, indeed! But how? That was the problem, but in its practical application it was purely an engineering one. It became a matter of providing each room of the proposed sanitarium with dry and rarefied air at suitable temperature. Can such a thing be done? It is being done every day in the industrial world. There are certain industries in which it is necessary that the product should be handled under certain conditions of atmosphere—for the good of the product. Transpose these conditions from a factory to a sanitarium-only instead of emploves working under certain atmospheric conditions, we have patients living under certain atmospheric conditions, and those climatic conditions are all favorable to their recovery. In other words, if we can produce the equivalent. under one roof of a sanitarium—if we can produce and maintain the equivalent of an Arizona. California, Colorado or other favorable climate. we have solved the problem of the combined sanitarium and climatic treatment of pulmonary tuberculosis in those parts of the country not specially favored by Nature with a suitable climate. We propose to build such a sanitarium, with the co-operation of the profession and laity, adjacent to Kansas City.

Necessarily, such an institution requires special design and structure. Our architect's plan shows a building—birdseye view—in the form of a Maltese cross. This is to be one story, with skylight effect for each of the one hundred rooms. The rooms are to be built air-tight, as

there is negative pressure—rarefied air—within. To apply our climatic process, a power plant adjacent to the main structure will serve as light and heating plant, and will also handle the air mechanically, in large volumes, for the purpose of drying the air, rarefying it, and delivering it to each room of the sanitarium at a proper desired temperature.

By this engineering process, the air which is contained in large tanks is heated, under pressure, to a minimum of 700 degrees Fahrenheit. It then passes through stone filters, thus being freed from smoke and dust, the heat having already rendered it germ-free. Then it is cooled to a very low temperature, next being raised to the desired degree for delivery to the room of the patient. All the air breathed by the patient is subjected to this process, provision being made to deliver thirty cubic feet per minute per room and per patient. As a result, we have primarily a dry, rarefied air at suitable temperature, giving the climatic equivalent of dryness, altitude, etc. While secondarily, but of considerable importance, we also have a pure, fresh air, entirely free from dust, smoke and bacteria.

It is a known fact that many patients go, or are sent, to Colorado, when such a case should be in Arizona or California. The reverse of this holds equally good, as all experienced with the disease are well aware. This disadvantage can be readily overcome in a special sanitarium of this kind. Furthermore, there is often a real and serious disadvantage in a natural climate, especially as regards altitude. Take Colorado as an illustration. At an altitude of 6000 feet there is an oxygen deficiency of 15 per cent. In other words, with normal respiration, the patient would get only 85 per cent of his oxygen requirements as compared with sea level. To get his 100 per cent necessitates increased frequency of breathing, with consequent increased heart action. By this and other engineering processes, we are able to introduce the necessary oxygen to make up this deficiency, thus permitting normal respiration and heart action, the advantages of which are apparent. Granting that sanitarium and climatic treatment are the most effective in conducing to recover, our problem is solved, for what engineers are doing in the industrial world in producing atmospheric conditions can also be readily applied to the treatment of diseases in sanitaria. Says the president of the "National Engineering Service:" "Your idea is eminently practical. I have no hesitancy in guaranteeing to produce for you a design for an installation with which you can control the three factors of climatic conditions, and vary the same as desired. The result will be that you can make your own climate and have it different in each of the departments if you wish."

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HERNIAS OF THE URINARY BLADDER AIME PAUL HEINECK, M. D., Chicago.

In a long series of hernia operations, every surgeon is certain to meet with some instances of hernia of the bladder. The urinary bladder in part or in its entirety is present in 1 per cent of all hernias.

Though the term hernia implies the presence of a hernial opening, of a hernial sac, sac-contents and sac coverings, and though in many hernias of the urinary bladder the sac is either incomplete or totally absent, nevertheless, to designate the condition under consideration, we fail to find any other term more appropriate, more sanctioned by long usage than that of hernia of the urinary bladder.

Many operators without their knowledge have punctured, incised, ligated, or removed a herniated bladder-process and then closed the hernial canal and operative wound in the usual way. By mistake, bladder protrusions have been excised for hernial sacs, or stitches used to close hernial canals have been passed too deeeply and found at the necropsy to have caught the bladder.

As vaginal bladder hernias fall more appropriately within the domain of the gynecologist, they are not included in this brief article. All the hernias of the urinary bladder herein considered are external hernias, that is, their outermost overlaying saccular covering was skin; each after reaching a certain stage of development gave rise to a more or less visible and palpable, external swelling in the obturator, femoral, inguinal, or other region, depending upon the anatomical location of the hernia.

In most cases, it was not possible to ascertain the age at which the hernia first appeared. Our personal observation and a review of the French, English and German medical literature of the last twenty years, justify the following conclusions as to age-incidence of hernias of the urinary bladder:

- a. They are extremely rare in infancy, child-hood and adolescence.
- b. They are most frequent after the fortieth year of life.
- c. Hernia of the bladder is an infirmity occurring chiefly in advanced life.

Hernias of the urinary bladder, like all hernias of viscera common to both sexes, are found more frequently in males. Most hernias of the urinary bladder are unilateral.

In bilateral hernias, both hernias either appear simultaneously or, as is more frequent, an interval of time, measured in weeks, months, or years elapse between the appearance of the first and that of the second hernia.

Anatomical Types

Hernias of the urinary bladder appear at various anatomical sites. Indirect or oblique

inguinal hernias escape from the abdomino-pelvic cavity, above Poupart's ligament, by way of the external inguinal fossa, and follow in their progress outward the course of the spermatic cord in the male, or of the round ligament in the female. They are complete or incomplete, according as the herniated viscus or viscera emerge or not beyond the external opening of the hernial canal. The complete are pudondal or scrotal. In the former, the hernial swelling descends into a labium imajus, in the latter, into a scrotal pouch.

Direct inguinal hernias escape from the abdominal cavity by emerging through either the middle or the internal inguinal fossa and first appear externally at the superficial abdominal ring. Direct inguinal hernias are always to the inner or medial side of the deep epigastric vessels, and, unlike the indirect, do not follow the entire course of the inguinal canal.

In our list of 159 of vesical hernias, 40 of which occurred in female patients and 2 in males. Statistics show that:

- a. Inguinal vesical hernias are more common in men than in women.
- b. Femoral vesical hernias are far more common in women than in men.
- c. Femoral hernias of the urinary bladder are an exception to the general rule, which is that inguinal hernias are more frequent in women than femoral hernias. Forty female patients presented femoral vesical hernias and only 17 presented inguinal hernias.
- d. Direct inguinal vesical hernias are of frequent occurrence.

According to the relation which the bladder protrusion bears to the peritoneum, hernias of the urinary bladder are classified into the following three varieties:

- a. Intraperitoneal, in which there is a complete hernial sac.
- b. Paraperitoneal, in which the herniated bladder-process is covered by peritoneum on one surface.
- c. Extraperitoneal, in which the herniated portion of the bladder is neither engaged in, nor contiguous to, a hernial sac.

In the intraperitoneal variety, the herniated portion of the bladder has a complete peritoneal covering and is contained in a true hernial sac. In the paraperitoneal variety, the herniated bladder-process lies to the inner side of the sac, and its serous covering enters in part into the formation of the hernial sac. Part of the herniated bladder-process has no peritoneal covering. The paraperitoneal form is not uncommonly a sliding hernia, and is frequently due to a continuous pull and traction exerted by the sac of an existing enterocele, epiplocele or entero-epiplocele upon the peritoneal covering of the urinary bladder. In the extraperitoneal variety, the herniated bladder-process has no peritoneal covering. The

prolapsed bladder is neither present in nor does it enter into the formation of a hernial sac. The extraperitoneal bladder-protrusion is in relation with the subcutaneous tissues and is always distinct from and to the inner side of the hernial sac, if one be present.

Clinical Types

Any herna of the bladder, be it intraperitoneal, paraperitoneal or extraperitoneal, may be reducible, irreducible, inflamed, obstructed or strangulated.

If the contents of a hernial sac return spontaneously to or can be manipulated back into the abdominal cavity from which they have escaped, the hernia is said to be reducible. At first, most vesical hernias are reducible; the largest number, sooner or later, become irreducible. Reduction of the hernial contents, spontaneous or manual, may be temporary, may be permanent, and is effected with more or less difficulty (general anesthesia may be required).

If the hernial sac-contents cannot be manipulated back into the abdominal cavity, the hernia is said to be irreducible, provided that the irreducibility per se does not cause any functional disturbance of the herniated organ or organs, and none are but slight intereference with the blood supply thereof. The irreducibility may be recent or of long duration. Partial or complete irreducibility predisposes to inflammation, obstruction, and strangulation, and is either of sudden or of gradual appearance.

If the communication between the herniated and the non-herniated portion of the bladder be more or less intefered with, the urinary bladder being transformed, in some instances, into a bissac, the hernia is said to be obstructed.

If, in addition to the irreducibility of the saccontents, the blood supply of the herniated organ or organs is interfered with to such a degree that their vitality is endangered or lost, the hernia is said to be strangulated. Strangulation may follow a paroxysm of coughing, heavy lifting, a fall, any strong muscular effort associated with great sudden increase of intra-abdominal pressure. In some of the strangulated cases, the vesical hernia was associated with an enterocele, an epiplocele or an entero-epiplocele, the bladder was not constricted, while the herniated omentum or intestine or both were strangulated. In others, the bladder was strangulated and the herniated omentum, intestine, or both were not constricted. The bladder-wall offers more resistance to constriction than does the intestine. Strangulation of the bladder is especially grave if renal disease coexists.

Etiology

The etiology of these hernias is largely the etiology of hernias in general. In the causation of this pathological lesion, the following factors are of importance:

a. All conditions that tend to increase intraabdominal pressure.

1. Occupations necessitating repeated muscular efforts associated with increased intra-abdominal tension, as the lifting or pushing of heavy weights, etc. (over twenty cases in our series).

- 2. Physiological or pathological states which distend the abdominal cavity, stretching the abdominal parietes, and widening the orifices normally present in the muscular and apponeurotic layers of the abdominal wall (enteroptosis, obesity, abdominal tumors, ascites, pregnancy, etc.).
- 3. All diseases associated with frequently repeated increase of intra-abdominal pressure (long standing lung affection, pulmonary emphysema, chronic bronchitis, habitual constipation).
- b. All conditions which weaken the abdominal wall.
- 1. Acute or chronic diseases debilitating the organism, especially such as cause great emaciation.
- 2. Obesity weakens the abdominal wall and increases the intra-abdominal pressure.
- 3. Traumatism. Most often the traumatism does not cause the hernia, but only reveals its existance (abdominal operations). Pathological adhesions of viscera or omentum to the anterior parietal peritoneal wall near a hernia opening may act as a predisposing cause.
 - 4. Previous hernia operations.
- 5. Enteroceles, epiploceles and entero-epi-
- 6. Feeble development or atrophy of the aponcurosis of the transversalis muscle and of the conjoined tendon. This factor is of great importance in direct inguinal hernia.

 - 7. Unduly large hernial rings.8. Excessive breadth of hernial canal.
- 9. Congenital defects present in abdominal wall.
- 10. Inherited or acquired weakness of abdominal wall.
- 11. Pre-existing hernial sacs of prenatal and post-natal formation.
- c. All conditions associated with prolonged overdistension, overstretching, impaired contractility, restricted mobility, etc., of the urinary bladder.
 - 1. Congenital malformations of the bladder.
- 2. Diseases of the lower urinary organs, impairing the expulsive force of the bladder or abnormally hindering the outflow of urine (vesical catarrh, prostatic hypertrophy, urethral stricture, phimosis, etc.).
- 3. Abnormal increase of the perivesical fatty connective tissues.

Symptomatology

Hernia of the bladder is usually an acquired condition. It occurs most commonly in late adult life and is, not infrequently, secondary to pelvic, vesical, and urethral diseases.

Direct inguinal hernias are said to be always acquired hernias. Congenital femoral hernias are pathological rarities. Femoral hernia is essentially a hernia of adult life. Congenital hernias appear at all periods of life. Even at the time of operation, one may be unable to differentiate between a sac of prenatal and one of post-natal formation.

Size is variable. A few of the reported hernias were simply pointing hernias; some were hazelnut sized, lima bean sized, pigeon egg sized, goose egg sized; others had the volume of a fist, of two fists, of a foetal head. In many, the hernial swelling is said to have been large, voluminous.

The hernial swelling may be cylindrical, ovoid elongated-ovoid; it may be grooved or bilobed, soft, elastic, and fluctuating, or hard and non-elastic. The hernial swelling may be a large, tense, smooth tumor, may occupy the scrotum, may extend as far as the middle of the femur, may occupy the entire left lobia, distorting the vaginal opening.

The size of the hernia is likely to change rapidly and considerably, being influenced by clinical type of hernia, position of body, amount of urine present in the bladder, etc. The hernial swelling gives a dull or tympanitic percussion note.

Pain is an inconstant symptom. Some of the reported cases are said to have been painless.

Diverse urinary disturbances (subjective and objective) may be present. These disturbances may be occasional or constant.

The subjective urinary disturbances are frequent urination, painful urination, pain at close of urination, difficult urination. (Patient in order to urinate, may find it necessary to elevate or compress the scrotal contents. These patients sometimes resort to unusual positions to empty their bladder; dorsal decubitus. In a few cases, on account of the narrowing or compression of the joining isthmus, considerable difficulty is experienced in emptying the scrotal portion of the bladder into the pelvic portion, vesical tenesmus (pressure upon hernial swelling gives desire to urinate), burning on urination.

The objective urinary disturbances are increase of swelling with accumulation of urine. decrease with voiding; two-step urination (miction a deux temps associated with a simultaneous lessening of the hernial swelling).

The injection of fluid into the bladder causes an increase in size of the hernial swelling. A sound introduced into bladder may enter the herniated bladder-process. A cystoscope introduced into bladder may show the round contour of the normal bladder distorted into T shape, may show the vesical opening of the herniated bladder-process, etc.

Pathology

In many cases note is made of the excessive breadth of the hernial canal, of enlarged hernial rings. The spermatic cord may be to the outer side of the hernial swelling, may be behind the sac, may be below and external to the sac, may be spread out over the bladder (anterior and outer surfaces).

To differentiate a hernial sac of prenatal formation from one of post-natal formation is at times difficult, at times impossible.

Acquired hernial sacs, except in hernias "par glissement," are always entirely derived from the parietal peritoneum.

The sac may be thin or thick, congested and infiltrated, intimately adherent to the spermatic cord, and not uncommonly, is capped by a thick mass of fatty tissue.

An extraperitoneal bladder hernia has no serous hernial sac. A pseudosac, consisting of connective tissue, overlies the herniated bladder-process. This connective tissue may be much attenuated or much thickened.

There may be an unusual amount of fat in the hernial canal. In the extraperitoneal and paraperitoneal forms, the herniated bladder-process is frequently covered with fatty tissue, the "lipome herniare" of the French authors. This prevesical accumulation of fatty tissue is thought by many to be an important contributary etiological factor.

In the paraperitoneal hernias, the serous sac is, at one point, intimately adherent to the bladder-wall. In the paraperitoneal and also in the extraperitoneal types, if a sac be present, the bladder is always to its inner, to its medial side, and, at times, below. The bladder may be adherent to the hernial sac, may be adherent to the spermatic cord.

In the strangulated cases, such contents as the following were noted: Hemorrhagic fluid and the bladder; bloody fluid, gut and ovary; a congested appendix epiploica; reddish brown fluid, bladder-diverticulum and small intestine.

The wall of the herniated bladder-process may be normal, thinned, or thickened. The herniated bladder-process may present the appearance of an empty or of a thickened hernial sac. Its cavity communicates with the cavity of the non-herniated portion of the bladder by means of a wide or narrow channel. It may be the seat of tuberculous disease, of carcinomatous disease; calculi may be present in the herniated and in the non-herniated portion of the bladder.

The spermatic cord is sometimes found spread out over the vesical hernia, at times is distinct from it, and often is in close relation with coexisting enterocele, epiplocele or entero-epiplocele.

Diagnosis and Differential Diagnosis

The existence of hernia of the urinary bladder may be overlooked, suspected or diagnosed before operation. The diagnosis may be made first at time of operation, or not before one or more days after operation. Evidence of the bladder having been wounded may not be present until some time after the patient has left the operating table. It has happened to eminent clinicians to fail to recognize even in operated cases the true state of affairs previous to the autopsy.

Before operation, the following symptoms are

suggestive of vesical hernias:

 Urinary disturbances: dysuria, two stage urination, frequent urination, scalding urination.

- 2. A hernial swelling, pressure upon which causes a desire to urinate, and which increases in volume with urinary retention, and markedly diminishes in size with urination.
- 3. A hernial swelling, the size of which is increased by air—or water—distention of the urinary bladder.
- 4. A hernial swelling in which fluctuation is detected or in which a metallic sound can be introduced by way of the urethra.
- 5. A hernial swelling, in which, after easy reduction of most of the contents, there persists a small doughy mass representing the extruded part of the bladder.

During the course of a hernia operation, the following symptoms or signs are suggestive of vesical hernias:

- 1. An unusual amount of fat in the neighborhood of a hernial swelling.
- 2. Difficulty in finding or in isolating the true hernial sac from the tumor mass.
- 3. 'The trabeculated appearance of the bladder muscularis.
- 4. Large sized external hernial opening and the fact that hernias of the bladder are usually nearer the median line than true hernial sacs.
- 5. The occurrence of a second hernial sac is so rare that it is a safe rule to regard as the urinary bladder, until proved otherwise, any structure resembling a second hernial sac.
- 6. The pedicle of a herniated bladder-process leads down behind the pubic bone into the true pelvis; the pedicle of a true hernial sac leads to the general peritoneal cavity.

Passage of sound into a cystocele, cystoscopic confirmation of its existence, escape of urine following wounding of bladder—all these are con-

clusive signs.

Keep in mind that vesical hernias are frequently associated with intestinal and omental hernias.

Injury of the bladder may not be noticed at the time of operation, and be diagnosed, for the first time, several hours after operation by:

a. Voluntary voiding or withdrawal by catheter of blood-stained urine.

b. Urine escaping from the hernial operative wound. This is usually preceded by the development and subsequent rupture or incision of a urinary phlegmon.

c. Sepsis due to urinary extravasation.

d. Peritonitis due to escape of urine into peritoneal cavity.

Treatment

In discussing the treatment, we will limit ourselves to the consideration of femoral and inguinal hernias.

An operator not on his guard may incise the bladder under the belief that he is opening a hernial sac. In operating upon recurrent hernias, guard against wounding the bladder. If isolation of the hernial sac from the inner lower portion of the ring be difficult, involvement of the bladder is to be suspected. Avoid this injury by securing a good exposure of the operative field. The more exact the stripping of the sac, quite up to the deep epigastric artery, the more likely will cystocele, especially in its earlier stages, be discovered.

Vesical hernias can be produced by traction upon a hernial sac, and efforts to place the ligature high up may, if one be careless, result in catching in its bite the bladder-wall.

Should the bladder be incised or otherwise injured, carefully suture it and provide appropriate drainage. Immediate closure of the bladder wound is of primary importance. It is affected by two, in some cases three, layers of interrupted or continuous sutures. Introduce your bladder-sutures so as to include all the layers of the bladder-wall, the mucosa excepted. Needless to say that only absorbable suture-material is to be employed. Even if the bladder be not opened, but merely injured, it is safer to fortify the weak spot by the introduction of a few catgut sutures.

The herniated urinary bladder-process may be (a) injured in attempts to carefully and cautiously separate surrounding adhesions (not only must one be careful as to sac-contents, but also as to contiguous tissues); (b) torn accidentally in trying to separate it from the hernial sac (the herniated bladder-process is more liable to be injured if it be the seat of such changes as are incident to strangulation); (c) punctured or pricked in suturing walls of hernial canal, in closing hernial orifice; (d) incised or ligated and cut off, being mistaken for a hernial sac.

Resection of the herniated bladder-process is indicated only if it be very much atteunated, necrotic, or the seat of other serious degenerative changes. Resection is to be followed by suture of the bladder-wound. If a calculus or calculi be present in the bladder protrusion, incise the bladder-wall, remove the foreign body, and repair vesical wound secundum artem. As a

routine procedure, resection of the bladder protrusion is not to be recommended.

If the bladder protrusion be apparently normal, free it from surrounding adhesions, if any be present, and then reduce it into the abdominopelvic cavity. As a routine procedure, bladder repair, bladder resection, and bladder reduction are always to be supplemented by refection of the abdominal wall. After isolation of the herniated bladder-process, supplemented by the repair of any injury which it may have sustained during the course of the operative procedure, we advise that the bladder be reduced into the abdominal cavity.

Vesical hernias have been successfully operated on for radical cure without anesthesia, under local, cocaine, infiltration, spinal, and general surgical anesthesia (nitrous oxide gas and oxygen, chloroform and ether in the majority of cases).

For inguinal hernias, the Bassini operation with or without transplantation of the cord seems to be the operation most universally employed.

Various types of operations were used in femoral hernias (Berger, Coley, Lotheisen's operations, etc.). Some operators closed the hernial sac by a ligature, others by a purse-string suture, others by suturing the edges.

In all the cases in which the heniated bladderprocess was not injured, in practically all those cases in which it was injured and repaired or resected and sutured, the organ, after being freed from surrounding adhesions, was returned into the abdominal cavity. Bernard, in one case, after suturing the bladder, fixed it to the lower angle of the abdominal wound.

Operators are not agreed as to the advisability of using a permanent catheter after bladder suture, nor as to the time during which this permanent catheter, if used, should be left in the bladder. Some leave it in one day; some two days, some three days, some four days, some five days, some six days, some one week, some two weeks.

Drainage extending to the bladder wound is a prudent provision against leakage from the sutured bladder.

If the hernial swelling contains in addition to a bladder-process, a knuckle of gut, a piece of omentum or some other viscus, the indication is first to free and reduce the bladder-process, and then carefully isolate, incise, and inspect the hernial sac contents. In the absence of contra-indications, all hernial sac-contents, sac-fluid excepted, are to be returned into the cavity from which they have escaped.

A deviation from this rule is indicated in cases:

1. In which herniated omentum has undergone such inflammatory, cystic or other changes

that, if returned into the abdominal cavity it might act as a foreign body.

2. In which the herniated gut or omentum is

gangrenous or of doubtful viability.

3. In which the hernial contents are in such a pathological state that their return to the abdominal cavity would jeopardize the patient's life.

The treatment of the associated sac-contents does not differ from that which obtains in hernial swellings in which no bladder-process is present; if those contents are injured by the surgeon, the injury calls for repair.

Results

Operations for the radical cure of vesical hernias have practically no mortality. What mortality occurs is due to conconitant circumstances; extreme old age, great debility, shock, long-standing strangulation, and unrecognized bladder injuries.

Operations for the radical cure of vesical hernias are rarely followed by disagreeable sequelae. A urinary fistula may complicate convalescence. These urinary fistulae usually close spontaneously. One can, if he so desires, attempt to close these fistulae under cocaine anesthesia.

A careful study of the cases in which death occurred shows that operations for the radical cure of vesical hernias have no mortality per se, if all bladder injuries be suitably repaired. In bladder hernias, recognized either previous to or at time of operation, before closure of the abdominal wound, recovery is rapid and uneventful.

Conclusions

- 1. The urinary bladder, in part or in its entirety, may escape from the abdominal and abdomino-pelvic cavities through any of the uncommon or common hernial orifices of the lower abdominal wall.
- 2. Hernias of the urinary bladder occur in both sexes, at all ages, and in all races. They are congenital or acquired, recurrent, recent or of some standing; almost always unilateral, very rarely bilateral. Like other hernias, they vary in shape, sizes, rate of growth, and in the discomfort and disability which they entail.
- 3. In the female, vesical hernias occur in nulliparae, primiparae and multiparae; they occur previous to, during, or after gestation and between gestations. They neither interfere with gestation nor disturb parturition.
- 4. According to their anatomical site, vesical hernias are designated as hernias of the linea alba, of the obturator, femoral, or inguinal regions. Anatomical relations justify the further subdividing of the latter into interstitial or intraparietal, direct or indirect, complete or incomplete, pudendal or scrotal.
- 5. The relation of the herniated bladder-process to the serous membrane lining the peritoneal cavity is well expressed by the terms intraperi-

toneal, paraperitoneal, and extraperitoneal. These designations are serviceable from the viewpoint of etiology, symptomatology, and treatment.

6. According to clinical manifestations, hernias of the urinary bladder are reducible, irre-

ducible, inflamed or strangulated.

- 7. A vesical hernia may be single, double, or be one of two or more hernias located on the same or opposite side of the body, having dissimilar contents, and presenting like or unlike anatomical and clinical characteristics. Thus, the same patient may present an inguinal cystocele and a femoral epiplocele, a reducible femoral vesical hernia, and an irreducible inguinal intestinal hernia. Case reports of an inguinal vesical hernia on one side coexisting with an inguinal enterocele, epiplocele or entero-epiplocele on the opposite side of the body are not uncommon.
- 8. As etiological factors in the causation of vesical hernias, the following are foremost:
 - 1. All conditions that tend to increase intra-abdominal pressure.
 - 2. All conditions, congenital or acquired, that weaken the abdominal wall.
 - 3. All diseases of the lower urinary organs that impair the expulsive force of the bladder or abnormally hinder the outflow of urine.
 - Pre-existing hernias and hernial sacs of prenatal or post-natal origin.
- 9. The pre-operative signs and symptoms may be unmistakable, vague, or absolutely wanting. In addition to such symptoms as are common to all other hernias, vesical hernias present peculiar suggestive and positive manifestations of their existence.
- 10. The herniated bladder-process may be the sole content of the hernial swelling, or merely one of the associated contents. In addition to a bladder-process, a hernial swelling may contain in part or in their entirety, one or more of the following organs: ureter, fallopian tube, ovary, appendix vermiformis, appendix epiploicae, omentum, and small or large intestine.
- 11. The herniated bladder-process may be free or adherent to surrounding tissues or organs, structurally normal or presenting degenerative, inflammatory or neoplastic changes; may be the seat of atrophy, hypertrophy, catarrh, gangrene, tuberculosis, or carcinoma, and may or may not communicate freely with the general vesical cavity. The herniated process of bladder may contain one or more calculi.
- 12. The vesical hernia may be the sole existing anomaly, or it may be one of two or more congenital or acquired pathological states, having or not having any relationship of cause or effect to the hernia (cryptorchism, vaginal cystocele, prolapsus uteri, prostatic hypertrophy, etc.).
- 13. Truss treatment for hernias of the bladder is not curative, is often productive of discom-

fort and may injuriously affect the structure of the bladder-wall.

- 14. In patients over three years of age, all hernias, irrespective of anatomical site, clinical condition or contents, should, in the absence of a constitutional state contra-indicating operations of election, be subjected to an operation for radical cure.
- 15. Clinical conditions so closely simulating hernias of the urinary bladder that a positive diagnosis without operation appears impossible, should be subjected to operative treatment. Benefit can be only derived from adherence to this rule. A diagnosis is established and a cure is effected.
- 16. All hernias of the urinary bladder, irrespective of sex, age, or social condition of patient, irrespective of size, shape, anatomical site or clinical type, call for operative treatment. Operative treatment is free from danger and is curative. The only contra-indications to operative treatment are extreme old age and the coexistence of a pathological state or states contraindicating operations of election. Operative treatment is the only rational treatment of hernia in the adult.
- 17. In all incarcerated and in all strangulated hernias of the bladder, operative intervention is indicated.
- 18. In all hernias, the ideal time for operation is previous to the development of degenerative or other pathological changes in the herniated organ or organs and previous to the occurrence of any of the various complications incident to hernias.
- 19. Women who suffer from any form of hernia should be carefully watched before, during and after their confinement so as to prevent or rather minimize any undue strain upon weak regions of the adominal wall. These women, at the close of lactation or toward the end of the first year following their confinement, should, in the absence of contra-indications, be subjected to an operation for radical cure of the hernia. In the female, the inguinal rings are comparatively small. They can be closed without inconvenience to the patient.
- 20. The most popular and efficient modern hernia operations permit a full view of the operative field and allow such a careful examination of hernial rings, canals, and surrounding structures that a prolapsed or herniated viscus rarely escapes detection.
- 21. In inguinal and femoral hernia operations, after the careful opening and isolation of the sac, see that the latter consists preferably of peritoneum only, and that its neck be freed from all other structures. The neck of sac should not be twisted, as by so doing the bladder is drawn toward the hernial opening and is liable to be

included in the ligature. Necrosis and peritonitis result therefrom.

- 22. In the course of a hernia operation, if, after opening of the sac and reduction of its contents, there appears a second sac, it is not to be opened, unless the introduction of a sound in the bladder shows the complete independence of this sac from the urinary reservoir.
- 23. In hernias of the urinary bladder, first expose and free the herniated organ or organs, and then reduce it into the abdominopelvic cavity. Follow this by suppressing the hernial sac if one be present, and then, according to an approved method, strengthen the weakened hernial area. Resection of the herniated bladder-process is only exceptionally indicated. When performed, it calls for immediate reconstitution of the urinary reservoir.
- 24. During hernia operations, the wounding of the urinary bladder can, to a large extent, be prevented by careful operating and by keeping this clinical entity in mind.
- 25. Wounds of the urinary bladder inflicted during the course of hernia operations, give a good prognosis if they be immediately, accurately repaired and if appropriate post-operative treatment be instituted. In the repair of bladderwounds, two or three layers of continuous or interrupted absorbable sutures give satisfactory results. Bladder suturing is to be followed by refection of the abdominal wall of the hernial area.
- 26. If within twenty-four to forty-eight hours after a hernia operation on a healthy subject, the catheterized urine contains blood, determine the origin of that blood. If a bladder injury be present, open the hernial operative wound or laparotomize, or do both and repair the injury.
- 27. The mortality of operations for the radical cure of hernia, if performed at an opportune time by rapid and skillful operator competently assisted, is practically nil. Coley operated upon 1,000 consecutive cases of hernia without a single death.
- 28. The operative treatment of hernias of the urinary bladder is highly satisfactory.

1809 So. Trumbull Ave.

A Unique Clinic—A medical clinic is being established at London, Ont., for those citizens and others who are well, by Dr. H. W. Hill. It will be the first of its kind on this continent. He proposes to have well people come to the clinic for examination so that they may learn whether they are suffering from incipient disease, so as to secure treatment before it is too late. A moderate fee is to be charged for such examinations

THE NEW INSTITUTE OF MEDICAL RE-SEARCH IN SCOTLAND

The institute of medical research, lately opened in St. Andrews, Scotland, is one of the world's unique institutions. The campaign which preceded its opening, was the result of the personal labors of the great heart specialist, Sir James MacKenzie, who, at the very zenith of his fame, left London to come here.

There was something in this turning point in Sir James' career which is scarcely covered by the word "romantic." No consultant of recent vears enjoyed greater success than he; no British doctor's name was more widely known or more highly esteemed in every country of the old and new worlds, when, with scarcely a warning of his intention, he came away north to this Scottish city.

Friends and patients alike were amazed, but the ever-increasing number of doctors of all nationalities who are turning their eyes towards the work at St. Andrews now furnishes an explanation and a justification. There was a great work to be done in behalf of medicine, but it was not being done. The need drove Sir James to a retirement which is, perhaps, the busiest phase of his life.

What is the need which is being served here? The progress of medicine demands that we shall be able to recognize the very earliest signs of disease. Unhappily, our present knowledge is almost exclusively concerned with the signs of disease already established and so, too often, beyond the scope of cure. The very simplest signs of ill health—for example, pain, exhaustion, breathlessness—are not understood, or at least they remain unrelated to possible consequences. Yet each of these signs means something. If it were intensively studied, it might be possible to say that here, or there, was the beginning, the very first indication of a grave illness still curable or preventable.

Let me give a concrete example. One of the workers at St. Andrews has been investigating exhaustion as it occurs in ordinary medical practice. He finds that this symptom is not at all the simple matter it was supposed to be, but, in reality, a very complicated affair.

One type of exhaustion is absent in the morning and progresses steadily during the day. Another type is at its worst in the morning and passes away at night. Another type has two maximal periods within the twelve hours. Exhaustion is usually the very symptom of ill health.

To what different derangements of oncoming diseases do these various symptoms point? Already some light has been thrown on this point and it promises to be of the most illuminating quality. Let the reader imagine the value to himself of a doctor who could interpret his earliest

and lightest symptoms in terms of future danger or otherwise and so save him while other physicians were waiting for his disease proper to show itself.

That is one aspect of the matter. The other is concerned with the after histories of the people being examined. This is an integral part of the scheme, for in order to understand the meaning of any symptom, you must know what happens to the people who show it. That was why St Andrews was chosen for this work. The old city is self-contained and its inhabitants tend to remain generation after generation within its walls.

Plans Years Ahead

It will thus be possible, in process of time, to discover the ultimate sagnificance of the so-called trivial signs of ill health.

"It will take us many years to complete our survey." Sir James MacKenzie declared, "but when it is complete we shall have such a knowledge of the early processes of disease and the means of detecting them as must prove of infinite value. Knowledge of this kind simply does not exist today. The man who sees the earliest signs of disease is not the great consultant, but the general practitioner."

The work of St. Andrews is thus founded on the general practitioner. He has been enlisted in it; he is carrying it on. One of these practitioners told me that before he realized the new method and the new aim he felt sometimes that doctoring was scarcely an honest way of making a living. "Now I feel," he added, "as if a weapon of almost unlimited power had been thrust into my hands."

The institute is a private house, the rooms of which have been simply furnished as consulting rooms. Each doctor has one of these. From 11 to 1 Mondays, Wednesdays and Thursdays research is carried on. During the rest of the day each practitioner may use his private room as a private consulting room. They have thus the advantage of the use of the scientific departments which are housed on the top floor, and comprise a chemical and biological laboratory and x-ray room, all simply but sufficiently furnished.

Tuesday afternoons some special subject, arranged beforehand, is discussed by a general meeting of all members of the staff. Friday afternoons the whole staff discuss the cases seen during the week, and any suggestions for investigations of any case at that meeting are proceeded with.—York Guille, in K. C. Star.

Hospital for Ex-Service Men—The former state home for inebriates, Knoxville, Iowa, has been leased by the United States government and will be remodeled and equipped as a hospital to accommodate former service men in the Middle West.

Continuing "The Medical Fortnightly and Laboratory News."

Medical The Herald

and Electro-Theravist

Incorporating the

Kansas City Medical Index-Lancet

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Vol. XXXIX.

September 15, 1920

No. 9



The Omaha Meeting, M. S. M. V.

Dr. Frank Crane was right when he said recently that Omaha was one of the most homey, sincere and hospitable cities in the United States. A city in which the "family spirit" predominates. A recent demonstration of Dr. Crane's declaration was found during the meeting of the Medical Society of the Missouri Valley, September 6-7. The longer you remain in Omaha the better you like it. The fact that she has grown to be a great city, the recent census reports showing nearly 200,000, has not in the least detracted from her genial hospitality and courtesy to visitors. From the time you arrive until you depart, the entertainment is continuous. Dr. John P. Lord. as chairman of the arrangement committee, left nothing undone that could add to the comfort and pleasure of the members of our association. Dr. Charles Ryan made an admirable presiding officer, dealing impartially with every question and allowing full and free discussion upon each paper. Dr. Karl Albert Meyer, of Cook County Hospital, made an excellent impression and gave us an up to date paper on Gastric Ulcer.

The program covered a wide range of subjects; the papers were all good and each was

given a careful hearing and full discussion. The annual dinner was an enjoyable affair, the music good and the dancing girl (?) entertained and surprised those present.

The society was entertained at a luncheon in the Palm room of the Fontenelle by courtesy of the Omaha medical profession. The ladies were given an automobile ride and a luncheon at the University Club. Dr. Lord on Sunday evening, dined the officers and the guest of honor, Dr. Meyer, at the Happy Hollow Club, preceded by a delightful auto ride over the boulevards.

The society honored Dr. W. O. Bridges, a charter member of the association, by electing him to the presidency. Dr. Bridges was not present, but was reported as being on the sea returning home from a European trip. The other officers elected were as follows: First vice-president, Dr. E. J. Watson, Diagonal, Iowa; second vicepresident, Dr. Austin McMichael, Rockport, Mo.; treasurer, Dr. O. C. Gebhart, St. Joseph; secretary, Dr. Chas. Wood Fassett, Kansas City.

Kansas City was selected as the next place of meeting, and an invitation will be extended to the Medical Society of the Southwest to hold a joint session with the Misouri Valley in Septem-

ber.

The following firms made exhibits on the mezzanine floor: A. S. Aloe, St. Louis; H. G. Fischer Co., Chicago; Aug. E., Fraass Co., New York; Magnuson X-Ray Co., Omaha; H. A. Metz Co., New York; Radium Chemical Co., Pittsburgh, and Chicago; Twentieth Century Chemical Co., Kansas City.

"Meet us in Kansas City next year-"

Twenty-fifth Annual Meeting in Kansas City

October 14, 15, 16 the American Academy of Ophthalmology and Oto-Laryngology will hold its twenty-fifth annual meeting in Kansas City, Mo., at the Hotel Muehlebach.

Among the distinguished men on the program we may mention Drs. de Schweinitz and Peter of Philadelphia, Drs. Wherry and Gifford of Omaha, Dr. Wurdermann of Seattle, Drs. King and Mayer of New York, Drs. Francis and Lewis of Buffalo, Dr. Large of Cleveland, Drs. Carmody and lackson of Denver, Drs. Beck, Pollock and Gradle of Chicago, Drs. Greenwood and Lancaster of Boston, Dr. Lynch of New Orleans, Dr. Stucky of Lexington, Dr. Vail of Cincinnati and many others.

About 200 rooms have been reserved at Hotel Muehlebach.

The following well known surgical instrument houses will have special exhibits:

Bausch & Lomb Optical Co., Rochester, N. Y.; DeVilbiss Mfg. Co., Toledo, Ohio; Aug. E. Fraass Co., New York; Gate City Optical Co., Kansas City: General Optical Co., Mt. Vernon. N. Y.; O. H. Gerry Optical Co., Kansas City; F. A. Hardy Co., Chicago, Ill.; Hettinger Bros., Kansas City; Merry Optical Co., Kansas City; E. B. Meyrowitz, New York; A. Mueller & Co., Chicago, Ill.; Physician Supply Co., Kansas City; Riggs Optical Co., Kansas City.

The outlook for a splendid meeting was never better. The local profession will make a special effort to see that every one in attendance has a good time, and a cordial invitation is extended to all who are interested in these special branches

of practice.

Migraine Therapy

Dr. Bernard Fantus, Chicago (Journal A. M. A.), has used with excellent results in the treatment of migraine a mixture recommended by T. Lauder Brunton, consisting of sodium salicylate, 1 gram, and potassium bromid, 2 grams. It is essential that the dose be given at the earliest possible moment when the headache is approaching; best, indeed, that it be given before it sets in by taking advantage of the signs by means of which these patients know that they will have a headache. Fantus like to impart effervescence to the medicine in the belief that it favors its efficiency and retention. If the whole dose is vomited up, the patient might be able to retain a quarter of it taken in a wineglassful of seltzer water every fifteen minutes. If a single dose does not suffice to jugulate the headache, a further dose may be taken hourly, until phenomena of salicylism, such as ringing in the ears, compel discontinuance. Fantus prescribes the remedy in this form:

	Gm. or Cc.
Sodium salicylate	60
Potassium bromid	120
Sodium bicarbonate	
Mix and divide into six blue powder	r papers.
Tartaric acid	10 8
Divide into six white powder papers	

Label: Mix contents of a white and a blue paper in half a glass of water. Repeat dose hourly if required.

Dr. Ellsworth H. Trowbridge, Kansas City, has purchased the residence owned by W. A. Pickering, for the use of the Trowbridge Training School for Backward Children.

"There's a Reason"—Purveyors to the medical profession, who have not been getting satisfactory returns from Missouri Valley and Southwest territory, will probably find "one good reason" in the absence of a message in the Medical Herald and Electro-Therapist. "A word to the wise is sufficient." Space is now being assigned for 1921.

Mr. Hugh Miller has retired as president of the hospital and health board of Kansas City to take up the position as manager of the Kansas City General Hospital.

Members of the Federation of Women's Clubs of St. Joseph have offered to go to the aid of the board of health and perform voluntary duty, sanitary inspection, etc., during the crisis in the financial affairs of the city of St. Joseph.

Advance in Price—Our readers will please bear in mind that the subscription price of the Herald will be advanced to \$2.00 on January 1, 1921. Subscriptions will be received at the one dollar rate, for any number of years, up to December 31.

Surgeons to Meet—The first annual meeting of the Eighty-ninth Division Medical Association will be held in Kansas City, Mo., October 4, with headquarters at the Muehlebach Hotel, under the chairmanship of Dr. Reginald H. Meade, Kansas City. During the forenoon clinics will be held and in the afternoon there will be a business meeting, and a banquet and entertainment in the evening.

Dr. William Fuller, president of the Chicago Surgical Society, is sojourning at Snapp's hotel. Excelsior Springs, where he is finding vacation days pleasant and rejuvenating. The doctor is accompanied by Mrs. Fuller, and together they are enjoying the beautiful golf links and bridal paths of Excelsior, drinking Siloam water, and satisfying the consequential appetites on the tempting delicacies found daily on the table at Snapp's.

THE TOUCH OF HUMAN HANDS Cry of the World's Wretched Ones.

The touch of the human hands—
That is the boon we ask;
For groping, day by day,
Along the stony way,
We need the comrade heart
That understands,
And the warmth, the living warmth
Of human hands.

The touch of human hands— Not vain, unthinking words, Nor that cold charity Which shuns our misery; We seek a loyal friend Who understands, And the warmth, the pulsing warmth Of human hands.

The touch of human hands—Such care as was in Him
Who walked in Galilee
Beside the silver sea;
We need a patient guide
Who understands,
And the warmth, the loving warmth
Of human hands.

—Thomas Curtis Clark.



NEURASTHENIA

This is a condition which taxes the resources of the physician and undermines the sanity of his patient. All degrees of nervous manifestation from hyperexcitability on the one hand to depressive melancholia on the other are present.

The term neurasthenia serves to designate many forms of neuroses as well as psychoneuroses. In neuroses proper the disturbances which manifest themselves in physical and mental actions are nearly always of a toxic character, but may be due to repressed sexual function.

Civilization means nothing more than suppression of animal instincts, and morality in these days, is generally understood to be the suppression of the sexual instinct which consists of a combination of many factors.

The causative factor of neuroses proper or neurasthenia may be found under one of the following heads:

- 1. Toxemia.
- 2. Syphilis.
- 3. Suppressed or perverted sexual function.
- 4. Americanitis.

In psychoneuroses hereditary taint may be added to the above causes.

In a few instances the cause of the patient's condition may be ascertained from his story, but often he will deliberately try to deceive the physician. If the patient's confidence in his physician is once gained and the interest of the physician sufficiently aroused the etiological factor may and probaly will be discovered.

A neurasthenic will always exaggerate, but to reject his story of suffering is to open the door to failure. While he exaggerates, suffering to him is a reality. Do not lose sight of the fact that his nervous system is on a strike, temporarily embarrassed or possibly bankrupt. In the majority of cases, however, the causative factor is so deeply covered by multiplicity of symptoms that its discovery is one of the most difficult problems in medicine. A patient should never be told that his troubles are imaginary. It may be true that his imagination is working over time, but there is always a beginning, a magneto as it were, to initiate his modified conception of tangible things.

Thousands of men and women are abiding in sanitariums and asylums conveyed there by authority of our courts and who might have been in happy homes of their own if the spark which caused the conflagration could have been discovered. When the physician chooses his pro-

fession he incurs a debt to mankind and in discharge of this obligation he is in duty bound not only to endeavor to save his patient but protect the public as well. There is no greater blot on the escutcheon of medicine than that of neglect of the neurasthenic.

We as physicians may be blamed for what we do not know, but every patient is entitled to the best there is in us and none more than the victim of neurasthenia.

There is no definite or distinct symptomatology per se of the condition we are pleased to term neurasthenia unless it be that of a combination of all the unpleasant sensations derived from any or all the varied pathological conditions to which man is heir.

It is more or less common for a physician who is unable to make a diagnosis of some pathological condition to jolly himself by a mental reservation that his pationt is a neurasthenic, prescribe a combination of antispasmodics and sedatives and allow the spark to become a blaze through want of recognition of the underlying cause of the patient's obsession.

Not all neurasthenics are constipated, but it is well to remember that intestinal stasis plays an important role in the etiology of neurasthenia. Whatever may be the theory of autointoxication, it is axiomatic that a large per cent, if not all cases are toxic. The offending toxin may come from without but usually comes from within the body. There may or may not be a focus of infection.

The statement that every case of neurasthenia has its origin in toxemia is not easily proven, but it is the belief of the writer, based upon experience, that every case is caused or accompanied by this condition.

In nearly all cases of neurasthenia there exists a dysfunction of the endocrine glands, suprarenal inefficiency being the most common. On theoretical grounds the administration of adrenalin is indicated, but no permanent results obtain from its use.

A child may be born with a predisposition to neurasthenia. Such a child requires but a mild stimulant, more or less constantly applied, to produce a well developed case of the disease. Cases with a hereditary taint are very difficult to manage.

It is comparatively easy to make a diagnosis of neurasthenia, but to locate the causative factor is often extremely difficult.

The prognosis entirely depends upon our ability to discover the causative factor and eliminate it. It may be possible to remove the cause and the symptoms still prevail in a less degree, due to habitude. This class of cases rattle on through life and die of old age.

The treatment of neurasthenia has always been empirical. These are the days of progress not only in commerce but in medicine. Skill in diagnosis, while a long way from perfection, is riding a higher wave than ever before. With all the modern aids at our command we should be able to determine the etiological factor of this condition more easily than heretofore, but with all the assistance of modern methods of diagnosis the treatment of neurasthenia is more or less a symptomatic one. The management of this condition is rapidly becoming easier as we advance in our knowledge of the application of physical measures in therapeutics.

After the confidence of the patient in the physician has been gained the way to successful therapy is well paved. Very seldom drugs are indicated. If any drug is to be prescribed in this disease for stabilizing the circulation, let it be the aqueous solution of the alcoholic extract of ergot. Through its agency the vaso-motor mechanism is steadied and the neurotic phenomena abated.

It is to be assumed that the mode of living, diet, habits, etc., have been investigated and so near as possible a protein free diet prescribed after which the most important thing to do is to clear the alimentary tract, this being best accomplished by castor oil for which "something just as good" does not exist as there is NO substitute. The cleanliness of the food tube should be maintained and all foci of infection eradicated. In seventy or more per cent of cases in the male the focus of infection will be found in the prostate, seminal vessicles or deep urethra; in a large per cent of cases in the female the focus of infection will be found within the pelvis. Posture and dress greatly influence the splanchnic circulation and must be corrected. Vicious habits must be overcome. A relaxed condition of the abdominal muscles is present in nearly all cases. Nearly, if not all, the organs of the abdomen are in a sate of ptosis. Too much blood is found in the splanchnic area. In other words the body is being continually bled into the great splanchnic lake. The liver is flooded and unable to properly prepare the existing toxins for removal. Whether this condition be the cause of the result of the nervous insolvency it should be corrected. abdominal muscles should be toned up by the systematic application of the sinusoidal current and the liver unloaded by the static wave or diathermy. A current strength of 800 to 1200 milliamperes should be passed through the liver for fifteen or twenty minutes daily until the desired result is obtained. The dysfunction of the nerves supplying the affected area should be corrected by vibration. Neurasthenia is usually associated with hypotension and is often the only objective sign of the disease. The Abrams

method of concussion of the spines of the sixth and seventh dorsal vertebrae is very effective in raising blood pressure. A few cases are accompanied with hypertension which when present may be easily corrected by autocondensation.

By the application of physical measures we are relieving a very much greater proportion of these cases than was possible before the adoption of this method of therapy. There is no question that this line of therapy will save thousands from ending their days in psychopathic institutions and asylums.

TREATMENT OF SEPSIS

Dr. William A. Brooks, Medical Director Liberty Mutual Insurance Company, in Medical Service Bulletin for June, 1920, says: "In the reports of the Massachusetts Industrial Accident Board from July 1, 1918, to June 30, 1919, the total number of accidents reported was 178,045. The cases of infection from these injuries out of this number were 5.178. Nineteen of the cases were fatal. Thirty-four of the cases had a permanent partial disability. One in every thirteen non-fatal cases became infected.

The total amount paid out for medical expense and compensation to injured employes for the year ending June 30, 1919, was \$5,219,760.24. The board estimates that 7 7-10 per cent of this expense or \$401,921.57 was due to infection. This is a most startling statement and it clearly indicates that greater effort must be made, not only to diminish the number of infections, but also to make some advance in the treatment of sepsis, which will enable the injured employe to return to work much more quickly.

"It is perfectly apparent, after a study of the out patients, that too much attention is paid to the dressings and not enough to the treatment. Wiping a wound out with iodine, I am convinced, is only a temporary benefit.

"The perfect first-aid dressing has not yet been discovered, as is apparent from the results of one out of every thirteen cases becoming infected. It is perfectly evident that cases must be treated.

A New Treatment That Is Successful

"During the past six months we have been conducting a series of experiments along this line. I merely quote one example. A man was admitted to Brooks Hospital with a bad septic thumb extending well into the palm of the hand. The whole abscess was laid wide open and thoroughly wiped out with iodine, and a dry dressing was applied. The day following the operation the dressing was changed and wound cleaned. On the second day the dressing was removed, and a culture was taken which showed a heavy growth of staphylococci. The wound was

then exposed to a number of electric lights, and was wiped off with clean gauze every ten or fifteen minutes. At the end of an hour a culture was taken and this also showed a heavy growth.

"The following day the wound was exposed for two hours and wiped every ten or fifteen minutes. At the end of that time a culture taken

showed a scanty growth.

"The day following, the wound was exposed for three hours under the electric lights and wiped every ten or fifteen minutes. At the end of that period a culture taken showed absolutely

no growth.

"I think it can be rightfully claimed that at least two weeks' time was saved by the treatment. So fully convinced am I of the efficiency of this method that as soon as possible we shall install in our out-patient departments tables with electric lights over them where septic cases can be treated.

"It can readily be seen that by adopting this method generally the percentage of expense in industrial surgery, due to sepsis, can be ma-

terially cut down.

One more convert to physical methods in therapy. It is only a question of time when phototherapy, electrotherapy and radiotherapy will share with other methods of treatment not only in our hospitals but private practice as well.

Radiant light and heat applied to wounds produces an increased resistance to infection to a degree capable of overcoming the germ process. This treatment is applicable to all types of superficial infection. The deep seated conditions are amenable to diathermy. The roentgen ray sterilizes local infections by inhibiting the active germ.

Radiant light and heat applied to the entire body for five minutes will stimulate the lymphocytes and lymphoid tissues and the effects will

persist for several days.

"The Thread of Flame"—Basil King's new novel which the Harpers announce for publication this month, is the story of a man who "came back from the dead," and who, at his wife's strange insistence, tride to bridge their three years' separation with silence. "You must promise never to ask me what happened during those three years, and I will promise never to ask you," she said. But Harowby found himself and the old life—the life which he had accepted as real before the queer thing happened—at impossible odds; so he followed The Thread of Flame again—and discovered his real metier, whereby he and his new-found wife came to real understanding and happiness.

We are pleased to note that work will soon be resumed on the new Medical Arts Building in Omaha.

THE GROVER X-RAY DOSE INDICATOR

JEFFERSON D. GIBSON, M. D.

Dr. B. B. Grover has furnished for the present and future roentgenologists and radiotherapists a very valuable instrument. It is the most simple, efficient indicator that has so far been brought forward. Its facts, it is true, have all been builded upon the valuable experiences and determinations of Hampson, Kienbock and Holzknecht, but nevertheless it simplifies the tedious work of these great masters; or in other words, is a "short cut," easily and quickly performed, to the long and tedious routes of observation by the older methods.

These pastiles of the older days served their purpose and laid the foundation for the Grover Indicator. While it is not only cheap, comparatively speaking, but simple and efficient so that almost a tyro with a little calculation and experience can definitely calculate his dosage for almost any condition, before he begins his treatment or at his leasure.

The Coolidge and the Gibson compressed air cooled tube can both be used with great accuracy

by means of this indicator.

Calculations and dosage are given so plainly and beautifully by its inventor that it is useless to go into details here. Study the indicator, follow instructions and the dose is readily obtained.

A person can live weeks without food, days without water, but only a few minutes without air, says the United States Public Health Service. Persons who pay but little attention to the purity of the air they breathe are not careful as to drinking water and food. Become a fresh air crank. Raise the office windows.

The National Anesthesia Research Society will hold its first annual meeting in Pittsburgh, October 4 to 8, in conjunction with the Interstate Anesthetists Society, the Western Pennsylvania Odontological Society and the Medical Society of the State of Pennsylvania. Headquarters will be at the William Penn Hotel. At this meeting will be awarded prizes aggregating \$200 for the best papers on original research on anesthesia presented before the society.

Producing a Climate Artificially—In this issue will be found an interesting article by Dr. F. C. Walsh, on the proposed new sanitarium for the treatment of tuberculosis, in which by mechanical means an artificial climate, favorable to those suffering from pulmonary disease, is to be produced. The plan seems to be a feasible one, and much interest in the project is being shown in Kansas City. Anyone interested in this laudable undertaking may obtain full infornation by addressing Dr. F. C. Walsh, 2208 Benon Boulevard, Kansas City, Mo.



GUY BOGART, Los Angeles, Cal.

Nature smiled Through early morning mists. Soft moonbeams, palm-reflected, Retreating before solic rays, The two commingling in rainbow splendor caught Of dew drop crystal. And morn awakening Kissed with that thorofied draught The Rosebud. Which straightway lifted A smiling face. Salvadore Carone's black Nanny goat, Sans aestheticism, ate that rose to Satisfy her hunger crave, Showing her goat joy. So Nature's smile traveled on. Black Nanny's milk fed **Dainty Cossette** Dark Italian kiddie; Sustained her romping feet Thru golden sunshine hours. In her crib at evenfall Cossette, her bottle empty, Smiled. A lone star-beam Caught that baby-gleam And back to Nature it returned.

There is truly an "all-sustaining thread" which "runs thru all and doth all unite." same science which weighs accurately the unthinkable bulk of distant suns weighs exactly the electron which no conceivable power can render visible to the eye. And science has discovered the One Law from electron to sun.

All life is rhythm and harmony; death is but maladjustment. The mystic scale of seven repeats in music in an ascending rate of vibrations. In like manner the mystic spectrum of seven colors. In the Kratona laboratories recently I gazed thru a little instrument, the invention of my close friend, Professor W. Scott Lewis, and saw the ultraviolet rays of red on higher scale than mortal eye has ever discerned except in this one laboratory.

Just a wee bit of transmutation. The search for the philosopher's touchstone thru alchemy brought the miracle of chemistry and modern chemistry has learned what it ridiculed in the alchemist—that matter and energy are one. Astrology led to astronomy, but a higher astronomical knowledge had preceded astrology; and modern astronomy is finding the truths of stellar influence it once derided. The materialist mocked the metaphysician; then by mutual studies they learned both were but partly right and their partitruths blended into the new mysticism.

No physician claims to "cure" (unless he is very young). You realize, of course, doctor, that Nature does the curing. You are but the means of helping Nature to get a chance. In the past our healers sometimes got in the way of Nature, but we are learning now that there are unseen forces working in that marvelous laboratory and factory of the body and that we must learn more and more to "keep off the soul" as well as to "keep off the grass" in the park.

I met a big, barking dog today, all bristled up and disputing my right to the bypaths. I just smiled at him-my brother-and he responded at once. Without a word-simply by the power of good fellowship and sincere love which I held for him—he wagged his tail and the bristles became smoothed. We smiled together; I talked softly to him and in his soul language he spoke to me. It was the transmutation of Nature's smile.

Love is the doctor's biggest asset. There is a physical body to deal with, but it is only the outer casing of the inner ego. Try the transmutation effect of a smile. I know you do. doctor! And doesn't it work famously?

Our Four Minds—There are four historical layers underlying the minds of civilized menthe animal mind, the child mind, the savage mind. and the traditional civilized mind. We are all animals and never can cease to be; we were all children at our most impressionable age and can never get over that; our human ancestors have lived in savagery during practically the whole existence of the race, say five hundred thousand or a million years, and the primitive human mind is ever with us; finally, we are all born into an elaborate civilization, the constant pressure of which we can by no means escape. Each of these underlying minds has its special sciences and appropriate literatures. The new discipline of animal or comparative psychology deals with the first; genetic and analytical psychology with the second; anthropology, ethnology, and comparative religion with the third; and the history of philosophy, science, theology, and literature with the fourth. We may grow beyond these underlying minds and in the light of new knowledge we may criticize their findings and even flatter ourselves that we have successfully transcended them. But if we are fair with ourselves we shall find that their hold on us is really inexorable. We can only transcend them artificially and precariously and in certain highly favorable conditions. Depression, anger, fear, or ordinary irritation will speedily prove the insecurity of any structure that we manage to rear on our fourfold foundation. Such fundamental and vital preoccupations as religion, love, war, and the chase stir impulses that lie far back in human history and which effectually repudiate the cavailings of ratiocination.—James Harvey Robinson in Harper's Magazine for September.



THE OMAHA MEETING MEDICAL SOCIETY OF THE MISSOURI VALLEY

Official Minutes*

The 33rd annual meeting of the society was held in the ballroom at Hotel Fontenelle, Omaha, Neb., Monday and Tuesday, September 6th and 7th, under the presidency of Dr. Charles Ryan of Des Moines, Iowa. The society was called to order by Dr. John P. Lord, chairman of the arrangement committee, who extended on the part of the Omaha profession, a cordial welcome to the members of the association. Dr. Lord expresed his regret that the entertainment of the Ak-Sar-Ben could not be presented on account of Labor Day. He stated that the annual dinner would be given at 7:30 o'clock, instead of the time announced, and that entertainment would be provided as a substitute for the Ak-Sar-Ben. He then introduced the president, Dr. Charles Ryan, who took charge of the meeting. After a few brief remarks and an expression of appreciation for being elected to the office. Dr. Ryan called for the reading of the minutes of the last meeting. On account of the minutes having been printed in full in the official journal, the reading was dispensed with by motion. The president appointed as committee on credentials, Drs. Woodson, Gardner and Haslam. The secretary made his annual report as follows:

THIRTY-SECOND ANNUAL REPORT OF THE SECRETARY

To the Officers and Members:

I have the honor to submit the thirty-second annual report of the secretary of our association.

Our annual meeting was held at the Hotel Fort Des Moines, Des Moines, lowa, September 18 and 19 1919, under the presidency of Dr. Charles Wood Fassett. of Kansas City. A very entertaining program was presented consisting of twenty-six papers and three evening addresses, only two of the essayists The meeting, which was in the failing to respond. nature of a Home Coming Affair, was characterized by much enthusiasm, especially among our members who had recently returned from the front. The banquet on Thursday evening was largely attended and was followed by three excellent papers, the guests of the evening being Dr. E. C. Rosenow of the Mayo Clinic, Lieut. Col. Horace H. Evans of Washington, who came as the personal representative of Surgeon General Ireland of the U.S. Army, Dr. Frank Smithies of Chicago. A symposium on the medicine and -surgery of the war was the concluding feature of our program and was participated in by officers from Fort Des Moines.

The society was entertained at luncheon by the Chamber of Commerce of Des Moines and an hour spent in social intercourse while informal remarks were made by Dr. Lewis Schooler, the mayor of Des Moines, and others. Thirty-three new members were added to the roll at this meeting.

During the year, we have lost three members by death and one by resignation. Those who died are Dr. M. V. Burrus, Syracuse, Neb.; Dr. A. T. West, Conway, Iowa, and Dr. L. J. Dandurant of St. Joseph,

who was drowned when his automobile was overturned into the Missouri River near Bean Lake on the evening of the first of August. Dr. Dandurant was president of the Buchanan County Medical Society, at the time of his tragic death.

At this time I wish to congratulate the members of the society upon the renewed interest being taken in our work and especially would I mention the fact that during the war, while many other societies were suspended, our association held its regular annual meetings and with good attendance. In spite of the fact that our society had over 100 members in the service, who paid no dues, our finances are in good condition, as you will notice from the treasurer's report. The secretary would recommend that the March meeting of the society be omitted at least until the high cost of living, paper, and travel shall have been reduced at least in some small degree.

On account of the continued exhorbitant cost of postage, paper and printing, the publisher of the Medical Herald has been compelled to increase his subscription price to \$2.00 per year, to regular subscribers. For 17 years the Herald has been furnished to members of our society at 50c per year, and at the present cost of production, this does not pay for the white paper used in the publication. It is therefore requested that the subscription price to the society should be advanced to \$1.00 per year in order to meet expenses in publishing the transactions and papers of our association.

In conclusion I wish to extend my sincere thanks to the individual members who have contributed papers and to the committees for hearty co-operation during the past year.

Respectfully submitted.

Charles Wood Fassett, Secretary.

Upon motion, the report of the secretary was received and its recommendations adopted.

The President's address was, upon motion, made a special order for the evening session. The election of officers was, upon motion, made a special order for 11:30 o'clock Tuesday.

The secretary read an invitation from Dr. Hal Foster inviting the members to attend the annual session of the American Academy of Ophthalmology and Otolaryngology, to be held in Kansas City, October 14-15-16. The invitation was, upon motion, received and filed.

A telegram was received from Dr. Robert T. Morris of New York, who had expected to be present, stating that a case in court had detained him.

The following papers were then read and discussed: Frank B. Young, Gering. Neb., "The Acute Surgical Abdomen, with Case Reports." S. Grover Burnett, Kansas City, "The Treatment of Epilepsy—A Thirty Year Report." John W. Martin, Des Moines, "Bone Surgery." Tom Bentley Throckmorton, Des Moines, "Hemianopia as an Early Symptom of Brain Tumor."

Afternoon Session

The committee on credentials having reported favorably on the following list of applicants, they were duly elected to membership in the association:

New Members

D. J. Bowman, Lincoln, Neb.; E. B. Bradley, Spencer, Neb.; Thomas Byrnes, Atlantic, Iowa; Edgar Christy, Hastings, Neb.; F. H. Clark, Clarinda, Iowa; R. R. Douglas, Clarks, Neb.; Francis Elias, Wymore, Neb.; M. S. Gray, St. Joseph, Mo.; O. M. Gilbert, Boulder, Colo.; H. B. Hamilton, Omaha, Neb.; Ralph W. Holbrook, Kansas City, Mo.; A. R. Hatcher, Wellington, Kans.; Francis R. Holbrook, Des Moines, Iowa; S. B. Hoskins, Sioux City, Iowa; F. A. Hecker,

^{*}Errors or omissions in these minutes should be promptly reported to the secretary. The papers will all appear in subsequent issues of the Medical Herald.

Ottumwa, Iowa; Czar C. Johnson, Lincoln, Neb.; J. W. King, Hartington, Neb.; Jos. S. Lichtenberg, Kansas City, Mo.; J. I. Limburg, Walthill, Neb.; C. L. Mullins, Broken Bow, Neb.; W. R. Neumarker, Columbus, Neb.; Geo. B. Potter, Omaha, Neb.; Robt. D. Schrock, Omaha, Neb.; M. P. Shy, Sedalia, Mo.; S. W. Staada, Sioux City, Iowa; Willis H. Taylor, Omaha, Neb.; H. C. Yates, Emerson, Iowa.

Dr. Lord offered as a motion, that the society defray the expenses of all guests who hereafter may be invited to its meetings. After a rather free discussion, the motion was lost. The following papers

were then read and discussed:

T. G. Orr, Kansas City, "Traumatic Ossifying Myosites." John W. Shuman, Sioux City, "Dwarfism and Giantism." (A case report of each). Oscar M. Gilbert, Boulder, Colo., "Symptoms vs. Physical Signs in the Diagnosis of Pulmonary Tuberclosis."

Evening Session

The annual dinner was held in the ball room of the Fontenelle at 7:30, presided over by Dr. Charles Ryan, who delivered the presidential address. The guest of the evening was Dr. Karl Albert Meyer of Cook County Hospital, Chicago, who presented an excellent paper entitled "Ulcer Cure Following Gastric and Duodenal Perforation."

Second Day-Morning Session

The following papers were read and discussed:
Howard D. Gray, Des Moines, "Uterine Suspensions." P. I. Leonard, St. Joseph, "Pathology and Local Infections." Arthur D. Dunn, Omaha, "A Clinical Classification of Renal Diseases." W. E. Walcott, Omaha, "The Diagnosis and Treatment of Weak and Flat Feet."

Election of officers for the ensuing year resulted as follows: President, Dr. W. O. Bridges, Omaha; first vice-president, Dr. E. J. Watson, Diagonal, Iowa; second vice-president, Dr. Austin McMichael, Rock Port, Mo.; treasurer, Dr. O. C. Gebhart, St. Joseph, Mo.; secretary, Dr. Chas. Wood Fassett, Kansas City.

Kansas City was selected as the next place of meeting, September, 1921.

The society adjourned at 12:30 to partake of a luncheon given by the medical profession of Omaha at which 125 were present

Afternoon Session

The following papers were read and discussed: Newell Jones, Omaha, "Urinary Infections in Early Life." Louis E. Moon, Omaha, "Local Anesthesia in the Treatment of Rectal and Anal Diseases." John E. Summers, Omaha, "Post Operative Gastric and Intestinal Hemorrhage, a Further Contribution." Thomas Byrnes, Atlantic, Iowa, "Causative Factors and Chemical Relations to Disease."

Upon motion, a vote of thanks was tendered to the medical profession of Omaha, the arrangement committee, Chamber of Commerce, and the Fontenelle Hotel, for generous hospitality and entertainment. Adjourned.

CHARLES WOOD FASSETT, M. D. Secretary.

Berkeley recommends parathyroid gland extract in the treatment of paralysis agitans. It is given in capsules or in a special solution hypodermically. Give small doses and keep up for a long time.

Arsenite of copper is useful in the early stages of biliousness when marked by fermentation of food, indigestion, attacks of dizziness with colicky pains, associated with diarrhea and constipation in alternation.

Che Doctors' Library "Next to acquiring good friends, the best acquisition is that of good books."—C. C. Colton.

THE MEDICAL TREATMENT OF CANCER—By L. Duncan Bulkley, A. M., M. D., Senior Physician to the New York Skin and Cancer Hospital, etc. F. A. Davis Company, publishers, 1919. Price, \$2.75.

Bulkley again gives the profession the benefit of his studies and clinical work in this vastly important field of practice—the medical aspect of treatment of cancer. Our attention has been so focused upon the surgical treatment of cancer and medical side so underestimated that we have become onesided. The philosophy of the author regarding the etiology of cancer is sound, it is becoming more largely accepted. Normal tissues do not become malignant, but when deprived of normal lymphatic drainage and bathed in toxic pabulum of nitrogenous origin, malignant proliferation does take place. The trial is well worth being followed with inoperable cases—the diet, the exhibition of potassium salts, the prevention of intestinal stasis with proper hygiene have given surprising results. The work quotes numerous clinical cases which resulted in complete restoration. It would be well for this volume to be more generally read and with an open mind that men might permit themselves to become acquainted with its philosophy. A distinction is made between epithelioma of the cutaneous surface to which this reasoning does not apply, and true cancer of internal organs. In justice to the author and to our clientele this volume must be read by all medical men.

NEOPLASTIC DISEASES—A text-book on turnors, by James Fwing, M. D., Sc. D., professor of pathology at Cornell University Medical College, New York City. Octavo of 1027 pages with 479 illustrations. Philadelphia and London: W. B. Saunders Company, 1919. Cloth, \$10.00 net.

One of the heavy works of the year, presenting a subject upon which the profession is demanding more light. The volume is the end product of several years of real labor, and while the author acknowledges disappointment on his part, the profession will receive his work with keen appreciation. The author undertook to write a book on the general principles of oncology, but soon found that the significant facts about tumors are not of general application, but are best revealed in the study of special tumor groups or even of special cases. Until recently it has been the prevailing impression that tumors fall into a limited number of grand classes, so that a given type occurring in any organ is identical with a similar mass elsewhere. It is the opinion of the author that this point of view has retarded the progress of our knowledge of tumors, he has done much to combat such a conception. The scope of the work is all encompassing. It considers history, chemistry, pathology, etiology and theroies of tumors either malignant or benign, if there be such. In its 49 chapters 39 of which are on special oncology, its volume may be considered encyclopedic. It is therefore not only a textbook, but a reference work on tumors. Its numerous cuts and beautiful type add much to attractiveness, and make its philosophy more tangible.

J. M. B.

NOTE—The Medical Herald's Kansas City office will supply any book reviewed in this department at publisher's price, prepaid. If an order for two books be sent at any one time, the purchaser will be entitled to a six month's subscription to the Herald. This plan is arranged for the convenience of our readers, and we trust it will stimulate trade in the direction of good books.—Editor.

DROPSY

Indications:

Dropsy of any origin, Bright's Disease.

> Valvular Diseases.

Heart Trouble following Influenza, Cirrhosis,

Anasarca.

This is an advertisement of our sole product, into which we put all our efforts to produce as nearly a perfect remedy as possible, for just two of the many ailments of humanity which you are called upon to treat.

DROPSY AND HEART DISEASE

ANEDEMIN doesn't always relieve even these, but it will give you a better result in a greater number of cases than any other remedy, and do it without danger to your patient and with no bad after-effects It has no cumulative action and produces no stomach disturbance; is a powerful diuretic without irritating.

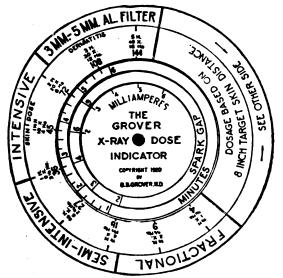
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City

FURTHER DETAILS ON THE USE OF THE GRO-VER X-RAY DOSE INDICATOR



(The setting shown in the above illustration is the proper one for the administration of a skin dose: Spark gap 6, mill. 2. minutes 3%=45.)

In roentgenotherapy the basis of all estimations is the skin unit or erythema dose. The erythema ${\bf r}$ dose generally accepted as standard is equivalent to H. (pastile on the skin), 16 Ha., 10x or 7½ M. A. M. with a 6 inch spark gap, at 8 inch target-skin distance. A setting of 6 inch gap, 2 ma. current for 3% minutes will produce a slight erythema on the skin of the face of a blonde. With efficient apparatus and Coolidge tube the results may be duplicated at will.

The product obtained by multiplying the number of inches of spark gap by the number of milliam-peres, times number of minutes, with a fixed targetskin-distance, will produce a certain result. A setting of 6 inch gap, 2 ma. current for 3% minutes with an 8 inch target-skin-distance will give an in-

tensity of one skin unit (6x2x3% equals 45).

As doubling any of the essentials (except targetskin-distance) doubles the dose, it is only a matter of calculation to know how to set the machine to secure any number of skin units. For example: The product number 45 indicates 1 skin unit; 90 2 skin units; 144 3 1-5 skin units; 225 5 skin units and so on. It is understood that this calculation contemplates a target-skin-distance of 8 inches and that the rays are unfiltered.

The intensity of x-rays upon the skin varies inversely as the square of the distance. If the distance from target to skin (t-s-d) be reduced one-half, the effects will be quadrupled. The other essentials, voltage, amperage and time, vary the intensity in direct proportion. In other words doubling either the spark gap, milliamperes or time, doubles the dose.

For convenience, the intensity of x-rays has been divided into Fractional, Semi-Intensive and Intensive.

Fractional dose, from 1/8 to 1/2 H. once or twice weekly.

Semi-intensive, from 1/2 to 1 H. single exposure at monthly intervals.

In Intensive doses sufficient filter must be used to reduce the intensity upon the skin to an erythema dose, unless dermatitis be desired.

Every Day Dionol Results

Small wonder that doctors everywhere use DIONOL more and more. The results are decidedly unusual. Send for literature giving scientific rationale. Many other results equally gratifying are given.

THIRD DEGREE BURN

Send for reprint of this remarkable case which Dr. L. voluntarily sent to a prominent medical journal, after healing these unusually deep burns with Dionol. Many other well known remedies were used in vain for months.

VARICOSE ULCER

Dr. M. writes: "Where can I procure Dionol in Philadelphia? Have just cured a case of varicose ulcer with same."

CHRONIC LEG ULCER

Dr. C. writes: "I have completely cured a chronic ulcer of the leg in six weeks with Dionol. Several other doctors failed in this case. Never saw a nicer result."

THE DIONOL COMPANY

(Dept. 27)

DETROIT, MICH.

CARBUNCLE

Dr. W. writes: "That case of carbuncle I ordered Dionol for cured it in great shape, and I received the fees and many bouquets. Thanks to Dionol."

INFECTED WOUND

Dr. C. writes: "A shrapnel wound in the foot of a Canadian soldier had failed to heal under any other treatment. Naturally I had little hopes of helping him. So gave him some Dionol temporarily, with instructions. Sometime after he came in and showed me that Dionol had healed the wound completely. No use saying I was surprised."

Filtration

90 or 2 skin units requires 2 mm. aluminum. 135 or 3 skin units requires 3 mm. aluminum.

180 or 4 skin units requires 4 mm. aluminum.

225 or 5 skin units requires 5 mm. aluminum.

270 or 6 skin units requires 6 mm. aluminum. 315 or 7 skin units requires 6 mm. aluminum and a thickness of sole leather.

NOTE-During the early days of roentgenotherapy, the M. A. M. or indirect method of estimating a dose, was employed. The variabilty of the energizing apparatus and rapid changes in vacuum of tubes made it impossible to duplicate results and the method fell into disrepute and was superseded by the pastile or photographic technic. These methods were employed for several years with reasonably accurate results. Since the advent of the interrupterless transformer and Coolidge tube there has been a gradual return to the old Milliampere Minute Method. It has been found that with modern apparatus a steady voltage and amperage may be maintained and results duplicated at will. However, the roentgenotherapist of today, even though he employs the M. A. M. method, still expreses himself, when speaking of dose, in Holzknecht (H.) Keinbock (X) or other units.

To the beginner and even those who have employed x-ray therapy for years, the various methods of measurement of dose are confusing and one is unable without considerable computation to translate the readings into M. A. M. To obviate these difficulties was born the Grover X-Ray Dose Indicator.

Manufactured of finest quality celluloid. Will last \boldsymbol{a} lifetime.

Full instructions for use accompany each indicator. Price \$3.00 by registered mail. Address The

Medical Herald and Electro-Therapist, 536 Ridge Building, Kansas City, Missouri.

Doctor, if you receive a copy of the Medical Herald and are not a subscriber, please take it as a cordial invitation to remit a dollar and receive our magazine for the year 1920. Turn to advertising page 68 and note the feast of "Good Things to Come" in the early issues of the Medical Herald.

The Relief of Functional Depression-The conditions under which the majority of people have lived during the past few years have led to widespread nervous depression and debility. Overwork, worry and restricted or changed diets have all tended to cause derangement of bodily functions. To correct and overcome these conditions of general weakness and debility, vigorous tonic treatment is invariably needed, and for this purpose there is no remedy that will be found more promptly and uniformly effective than Gray's Glycerine Tonic Comp. Under its systematic use, combined with good and hygienic care, the digestion is improved, the nutrition is aided and promoted and the vitality of the whole body raised substantially. The nervous and mental condition of these weakened and debilitated patients shows a gratifying improvement in every way, and in what is often a surprisingly short time they regain their strength and vitality, with complete relief from their systemic depression and loss of bodily energy. The use of Gray's Tonic Comp., together with painstaking regulation of the hygiene and diet has undoubtedly saved many of these cases of nervous depression from developing into graver ills.

The Management of an Infant's Diet

DIARRHEA

The importance of nourishment in intestinal disturbances that are so common during the warm weather is now recognized by physicians, and it is also appreciated that

the nutrition furnished must be somewhat different than the milk modification usually supplied to the normal infant.

Food elements that seem to be particularly well adapted, mixtures that are suitable to meet the usual conditions, and the general management of the diet, are described in our pamphlet—"The Feeding of Infants in Diarrhea"—a copy of which will be sent to any physician who desires to become familiar with a rational procedure in summer diarrhea.

Mellin's Food Company,

Boston, Mass.



Some Baby—"Not long ago a young couple in my part of the state," a correspondent writes us, "became the proud parents of a little girl. They wanted to weigh the youngster as soon as she was dressed, but had no scales. Just then the ice man came along and they borrowed his scales. To their surprise the little one weighed forty-four pounds."

Migraine—The neurosis known as migraine is especially amenable to the action of Peacock's Bromides. This well known preparation rarely fails to relieve with gratifying promptitude the exacerbations of headache and vomiting which distinguish these cylic neurotic manifestations. A teaspoonful should be given every two or three hours until relief is obtained.

Enfeebled Digestion — There are many persons whose digestion is enfeebled, and undoubtedly the conditions caused by the war have had the result of making this number much more numerous. Seng is particularly valuable in these cases as it will promptly stimulate the glands of the stomach, and in combination with a judicious regulation of the diet may be depended on to soon bring about an increase of digestive activity.

A Powerul Germicidal Soap — A non-irritating, harmless, and odorless germicidal soap for the use of physicians, surgeons, dentists, druggists, and

nurses, has long been sought. At last, one has been found, which not only kills all germs, but which makes a fine cleansing lather and leaves the hands soft and white. The germicidal agent used is Chlorazene, Dakin's powerful but harmless water-soluble antiseptic. Combined with a neutral saponaceous base, Chlorazene Soap Powder is ideal, not only for sterilizing the hands prior to and following operations, examinations, and surgical work, but is also used to cleanse wounds, to deodorize perspiring feet, and to sterilize operating room instruments and utensils. For scalp and skin diseases, it has a wide field of usefulness. Chlorazene Soap Powder is the safest, most satisfactory and convenient germicidal soap available, wherever a non-irritating, cleasing, sterilizing agent is desired. Try it once, and you will be convinced. Literature may be obtained by addressing The Abbott Laboratories, Chicago..

The Therapy of Adrenalin-The important position of Adrenalin in the material medical is undoubtedly attributable to the vast amount of scientific work that has been done in connection with the product, to say nothing of the marvelous array of clinical facts that have been accumulated and now constitute the basis of our knowledge of its therapy. This thought is suggested by the apearance in our advertising section, this month, of a unique announcement from Parke, Davis & Co., entitled "Adrenalin in Medicine," which every medical practitioner should read. It deals with the physiological action of the medullary suprarenal principle and reflects a clear light upon a subject concerning which much misinformation persists, even in medical circles. This, we understand, is the first of a series of short essays that will have to do with the scientific aspect of the subject rather than its commercial features. Others will

Tetanus Antitoxin

Diphtheria Antitoxin

Acne Vaccine (Mixed)
Colon Vaccine (Acne)

Pneumococcus Vaccine

Pneumo.Antigen (Therapeutic)

Streptococcus Vaccine

Strep. Pneumo. Vaccine

Staph. Vaccine (Mixed)

Ozena Vaccine (Mixed)

Pertussis Vaccine

Pertussis Vaccine (Mixed)

29 Urethritis & Cystitis Vaccine

Respiratory Vaccine

Influenza-Pneumo. vacc. (Mixed)

Typhoid-Paratyphoid Vacc.
Colon Vaccine (Mixed)

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Order By Number

BEEBE VACCINES

Freshly isolated organisms of HIGH ANTIGENIC value are being continually added to Beebe Vaccines, thus giving them the greatest prophylactic power and therapeutic action.

We operate two large Clinical Laboratories and receive daily a great number of strains of various organisms, FRESHLY ISOLATED from ACTUAL CASES. This assures cultures of HIGH ANTIGENIC VALUE.

"Infinite details greatly influence final results."

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include discussions of "The Treatment of Asthma;"
"The Treatment of Shock and Collapse;" "The Treatment of Hemorrhage;" "Adrenalin in Combination with Local Anesthetics;" "Adrenalin in Organo-therapy." These topics appeal strongly to the progressive physician who seeks to be well informed. New facts are being constantly developed in the domain of endocrinology; and as this series of concise "talks" will cover the field pretty thoroughly, in so far as Adrenalin is concerned, it will be well worth while to review them.

The old saying that "a new broom sweeps clean" has been somewhat cynically applied to a tendency upon a part at least, of the medical profession, to forsake old time proven and trial tested remedies for something different or something new, concerning which claims are made that are not always justified by the clinical results that follow. There has been a tendency to neglect or to discount the use of mercury in the treatment of lues ever since the advent of the much exploited arrhonic treatment. It requires but a careless reading of medical jorunals to appreciate that the pendulum of professional opinion is swinging back toward the realization that after all, mercury and iodines cannot be dispensed with in the treatment of syphilis. Many physicians who have in the past been accustomed to using Pil Mixed Treatment (Chichester) have been slow to forsake this old and proven product altogether. The clinical results that are obtainable from the use of this product are so good and so convincing that many physicians have refused to give it up wholly or even in part. The great majority of medical opinion at present seems to point to the necessity for the use of mercury and

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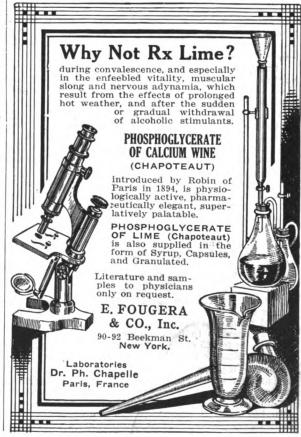
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Doctor, if you receive a copy of the Medical Herald and are not a subscriber, please take it as a cordial invitation to remit a dollar and receive our magazine for the year 1920. Turn to advertising page 68 and note the feast of "Good Things To Come" in the early issues of the Medical Herald.

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Who Was Jenner?-If you were confronted with the statement that Edward Jenner, the discoverer of smallpox vaccination, was an English country gentleman, that he was not a doctor, nor had ever studied medicine, would you be able to say otherwise? Most of you would probably reply that you believed he was a physician, basing your opinion more upon his association with medical subjects, especially smallpox, rather than upon accurate information. As a matter of fact he was a physician. He was born at Berkeley. Gloucestershire, England, and at an early age was apprenticed to Messrs Ludloy, practitioners at Sudbury, near Bristol. He remained with them for six years. It was during that time that the famous milk-maid incident is said to have occurred. A young country woman came to seek advice, and the subject of smallpox was mentioned in her presence. She is credited with the observation "I can not take that disease because I have had cow pox." In his twentyfirst year, Jenner went to London to continue his professional studies under John Hunter, the famous anatomist and surgeon. He resided in Hunter's family for two years, becoming under his tutelage an expert anatomist and proficient pathologist. In 1773, he settled in his native village, where he acquired a large practice. In 1792, he decided to confine himself to medicine and with this in view he obtained a degree from St. Andrews. After years of study and observation on smallpox and cow pox, came the famous vaccination and inoculation of James Phipps, a healthy boy of eight. This successful experiment was followed by many others, and in 1798, he published his first memoir. In the beginning the practice of vaccination met with violent opposition; later seventy prominent physicians and surgeons of London signed a declaration of their entire confidence in it. In 1803, a royal institute for the extinction of smallpox was founded and Jenner made the head of it. In 1858, a public statue in his honor was erected From a universal scourge, through Jenner's discovery and its even partial application, smallpox has become one of the least feared of diseases. Through vaccination and revaccination with a safe, potent vaccine virus, it can eventually become a medical curiosity. When properly stored the vaccine virus of Eli Lilly and Co. is said to give a maximum percentage of "takes" in primary vaccinations and reliable findings in revaccinations.



Vol. XXXIX.

OCTOBER 15, 1920

No. 10



THE PHOSPHATIC INDEX—ITS VALUE TO THE GENERAL PRACTITIONER.

BYON E. SMITH, M. D., Angola, N. Y. Health Commissioner, Surgeon N. Y. C. Lines.

No one, even at this late date denies that medicine is an inexact science, and no one is more cognizant of the fact than the general practitioners, the men that must be able to cope with any and all conditions in which the human body may be involved in disease.

It is not always possible, and very often it is impossible for the general practitioner, especially for those remote from medical centers, to call men specially skilled in certain lines. It, therefore, behooves us as general men, to keep posted as closely as possible on the very latest methods as we find them reported in medical journals, or if we can do so, avail ourselves of the vast experience of others.

But to many of the vaunted scientific tests, and even remedies that are brought forward, there seems to hang a tinge of suspicion, and especially is this so after one has spent time and money in gaining knowledge.

Take for instance, blood pressure. We have been taught, and I am sure that practically all still adhere to the same teaching, that a high pressure means great danger to the patient; he is liable to death from apoplexy at any time, and that time, he is told, will arrive only too soon.

Now we read, Journal A. M. A., May 17, 1919, from the pen of Major Dana, Chief Cardiovascular Examiner in the late war; a man who has made over 60,000 examinations, "The more I study blood pressure, the less I become convinced of any accepted interpretations of the test." How often have I had the same thought. Many very high pressures have been observed, yet it has been rare that death or apoplexy has

resulted; in fact in many, practically all, I have found the pressure to fall to almost normal after regulating the intestinal disturbance, or nervous system, as the case may be.

The Wassermann, I simply quote a few statements (N. Y. Medical Record, September 6. 1919, Association of American Physicians, "The Diagnosis of late Syphilis of the Central Neryous System").

Dr. M. J. Rosenau, Boston, Mass., "In reference to the Wassermann, it is a crude test, and in many series of cases the number of positive results might be depended on the sensitiveness of the antigen used."

Dr. H. F. Swift, N. Y., "If one followed the reaction with the two methods—the ice box antigen and the cholestrin antigen with the warm technique—one would often find cases which would give a positive reaction with one method and a negative one with the other."

In the September 13th number of the N. Y. Medical Record, we find a lengthy article on the "Dangers of the Lumbar Puncture."

In the same journal, September 6th, Dr. Joseph Collins the celebrated authority on Nervous Diseases, says regarding lumbar puncture, "I do not mean to decry lumbar puncture as a means of diagnosis, but that it was not comparable in any way with the ordinary symptoms." Dr. Collins politely infers that if one knows their symptoms, he does not need a lumbar puncture to convince or prove the case.

With such glaring facts staring one in the face, and the further proof by the use of these and numerous other highly (at first) praised methods in many cases, with practically failure in a large percentage of others, can one be blamed for being skeptical.

Following such statements, dare I write of something new—not new to the writer (I have used it for several years), but possibly to many of my fellow practitioners.

My attention was first called to the Phosphatic Index by Dr. J. C. Clemensha, (N. Y. Medical Journal) some five years ago, "The Phosphatic Index, its relation to Disease of the Eyes." This article especially interested me as

Dr. Clemesha reported several cases in which the symptoms, although referring particularly to the eye, he could not relieve with glasses, but did afterwards by using the Phosphatometer and prescribing accordingly.

In this same connection and along similar lines, one of the leading oculists in this section, not long ago said, "At least 80 per cent of all diseases of the eye have a cause located other than in that organ, and we are not sufficiently versed in general conditions to ascertain them."

Men who have made neurasthenia a very close study, know that one of the most important symptoms we meet, is headache; these headaches cannot be relieved in but a small number of cases by glasses alone, yet it is for headache that 90 per cent of the patients are sent to the oculist. The question might be admissable here, why not correct their general health and relieving them so far as possible of neurasthenia; possibly glasses would not be necessary?

Careful study of these cases, and this was admitted by Clemesha, and has been by various other authors, although the eye, intestinal tract and kidneys, to some extent, may be a causative factor, a deeper cause was evident; one that should be dealt with, not by a specialist, but the general practitioner.

But it is not the oculist alone that is complaining. Men in all branches—surgical where wounds are indolent, slow in healing; where conditions are not fully relieved after operation; where local treatment fails in conditions of the female pelvis; disease of the nose, throat and the like. The solution of these failures is quite apparent; a want of tone in the tissures due to a diminished resisting power.

Resisting power in tissue, flesh or bone, is controlled or kept at a normal state according to the condition of the nerve cells of the brain and nervous system.

If we have anemia, it is evidenced in many ways. Although not constantly a characteristic indication, paleness of the tissues, face, etc., are usually present.

Where there is a deficiency in bone salts, evidence is supplied in the shape of rickets and the like; mal-nutrition of muscles shows itself in flabbiness.

But with the nervous symptom, things are different; were it not for the pains that frequently accompany lowered resisting power it might be called the silent messenger.

But the messenger is not silent so far as results are concerned. A low condition in the nerve cells, that is, a lowered nutritional condition, but its ramifications extend to any and all parts of the body; it is the condition that produces the lowered resisting power and is termed neurasthenia, or nerve tire.

The word "neurasthenia" is pretty well known; it has probably covered more errors than any other designation in medicine, yet the same conditions is rarely thought of unless there is considerable pain accompanying it.

It may seem a rather positive statement, but neurasthenia, or nerve tire is at the bottom of fully 90 per cent of the conditions we are called upon to treat that do not respond to well directed medication or surgery, when the latter is necessary. This is quite clear. In the great majority of cases there is more or less nerve-cell starvation present, it makes itself known by a lowering of resisting power; individuals will not be able to withstand infections; wounds will heal slowly; and the different tissues will not respond with the natural rapidity to drugs or treatment.

The carrying out of the method for ascertaining the phosphatic index is so simple, so void of expensive apparatus and technique, it occurred to me that if all Clemesha said, and what others have testified to were so, the general practitioners have been given a most valuable asset.

So much has been written on this subject of late that I will not burden you with a repetition, but give you an epitome of the theory as given the medical profession by Dr. J. Henry Dowd, of Buffalo, the originator of the Phosphatic Index, whose articles upon this subject appeared in the New York Medical Record some time ago. all of which I can fully substantiate by personal experience.

- 1. Phosphorus is an important constituent of the human body, and especially the nervous system; in fact its presence is indispensable to life. It occurs as acid sodium phosphate. acid calcium and magnesium phosphate. These are taken from the food we eat in the form of phosphorus, lecithin and nuclein.
- 2. As with other symptoms of the human body, sufficient is taken from the daily consumption of food not only to carry on the daily call for energy, but what may not be necessary is stored for cases of emergency, as during illness when sufficient food is not taken to supply the daily call for energy, this is called the reserve and is in direct conformity with the fact that we have two eyes, two kidneys, two lungs, etc., when one will do the work.
- 3. Metabolism of the nervous system is shown by the presence of phosphates in the urine as end products of lecithin, nuclein, etc.
- 4. Phosphate in the urine varies in different conditions; time of day the estimation is taken, variety of food consumed, but most important, and far more markedly, by the condition of the nervous system, for the nervous system controls every movement, every action, thought, word or deed brought forth by the human body. Using

the second urine passed in the morning, about 10 o'clock, if possible, fill the phosphatometer to "U" and add solution to "S"; shake thoroughly and set aside for ten minutes.

A plus Index must be solid above "N. P." and calls for sedatives; if solid at "N. P." the nervous system is in a practically normal condition and is in no way a factor in the condition

presented.

If it will not sink; sinks part way and is light and fluffy, or goes below "N. P." nerve energy is low and food, phosphorus, etc., is being called for. These must be administered artificially if results are to be obtained from any cause whatever, medical or surgical. (Phosphorus should be given in its free state as it is the only way it is of value to the system.)

To make the index of the utmost value, Dowd

calls attention to a few important points.

The urine should be as near a normal specific gravity as possible, except in the presence of diabetes or hysteria, where it is always either high or low.

Diuretics, cold, etc., will increase the amount

and must be taken into consideration.

Fevers, sweating, etc., will diminish it: in either condition a fresh sample had better be obtained before forming a positive opinion.

In the Dowd phospatic index I can only substantiate the opinions of Smith, Clemensha, Haines, MacPherson, Talbot and others, that it is one of the most valuable procedures given the medical profession in the last ten years; it is simple, inexpensive, quickly carried out, gives as much important information as any other scientific test we have and should be a routine examination in all cases.

Although the phosphatometer is one of the most valuable assets the general practitioner can possess, it is not always at hand, especially in cases at home and I, therefore, have to depend upon a few symptoms which may be almost considered as cardinal of lowered tissue tone due to insufficient nerve-cell nourishment.

They are always tired, as tired in the morning on arising as when they retire. Very susceptible to cold, especially cold draughts; they will complain of coldness of the extremities even in the warmest weather; more or less headache, especially over the eyes if these are used to any extent, but always along the occiput and down the back; backache and more or less lucorrhea is a prominent symptom in women, and catarrhal conditions in both sexes. They become exhausted at the least exertion, especially where the nervous system comes into play, as sewing, figuring and many at times by viewing moving pictures.

Many cases could be reported of the most marvelous results ensuring almost at once when phosphorus was used in conditions as above enumerated. Suffice to say, one of the secrets of success is the obtaining of a preparation that gives free phosphorus, and not a substitute. Chemists tell us, and I suppose they know, phosphorus made in pill or tablet form oxidizes a few days after prepared and no phosphorus is obtained.

I have used a preparation for several years, a formula originated by Dr. Dowd to be used in connection with the phosphatometer. It contains nux vomica, can ind. and free phosphorus. We can be sure of this as anyone can prove its presence. We, as physicians, owe much to the Richardson Drug Company, the manufacturers of this preparation, in not allowing it to be sold to the public except on the prescription of a doctor.

THE ERRONEOUS ESTIMATION OF GASTRIC ACIDITIES

LOUIS G. FRUMSON, B. S., M. D.

Not only the gastroenterologist, but the general practitioner and diagnostician as well, is frequently called upon to make or to interpret an analysis of the gastric acidities, and, while it is perfectly true that these estimations are only relative, if they are incorrect the faulty representation will mislead and ultimately cause an error in diagnosis. But we do not make a diagnosis from the gastric analysis alone, without taking into consideration the history and the physical, laboratory, and x-ray findings, or at least we should not; but the history may be vague, the physical findings very meager, and the roentgenology negative. The condition may be a functional one and a correct gastric analysis becomes an urgent necessity, the only certainty upon which we may build our deductive framework to reach the desired end, namely a correct diagnosis. Will Mayo (1) has said that only 10 per cent of all of the gastroenterological cases, examined by Car-. men at their institution, showed definite x-ray pathology.

The quantitative estimation of free HC1 by the use of a 0.5 per cent solution of dimethylamino-azo-benzol (Topfer's Reagent) as an indicator, is universally adapted and consequently no comment is necessary here, except to say that it answers the purpose admirably. Also the determination of the total acidity with an alcoholic solution of phenolphthalien is a procedure which has braved the tests of time, but I do wish to take exception to the arbitrary designation of the organic acids and their salts, the products of fermentation, as a certain prescribed number, and letting it go at that. Cohenheim, Ewald and Carmen in their texts give us the free HC1 and the total acidity in their case histories, but how are we to determine from these two known estimations the amounts of fermentative products present? Possibly the greater part of the total acidity represents the organic acids and salts, and the remainder may be an infinitesimally small portion of combined HCl, or vice versa. If we do not determine the amount of organic acids present, and they are usually not estimated, we cannot determine the true amount of physiological HCl present, for this is the factor which we are interested in. Who cares about the amount of acids or salts ingested with the testmeal, still this is a prominent fact which must be deducted from the total acidity, a factor entirely unknown if we make no effort to detect its presence and amount.

If the quantitative estimation of the acidity in question was an exceedingly difficult problem, or required special apparatus, knowledge or technic, there would be a plausable excuse for not including it in our usual curriculum of analysis, but inasmuch as the estimation of the organic acids and salts is a very simple titration, a few paltry moments spent to make our gastric analyses accurate and complete will, I believe, be well repaid to the investigator, and he will not express the total acidity as such which now masked as it is, sails under false colors. quantitative titration of the organic acids and salts is a very simple procedure, and the following test meets all of the necessary requirements very well. A one per cent aqueous solution of sodium alizarin sulponilic acid is prepared and is used as the indicator. This solution has the advantage of stability, for solutions a year old give just as good results as a freshly prepared one. One or two drops of this solution are added to 10 c.c. of filtered gastric juice and neutralized with a decinormal solution until the end point is reached at which time the liquid assumes a dark reddish-purple Burgundy wine color. The only possible objection to this test might be the difficulty of end point determination, for just before complete neutralization a deep red color makes its appearance. With a little experience the true end-point of the titration is easily ascertained. This method not only titrates out the organic acids and their salts but also neutralizes the free HC1 present in the gastric contents, but with the free HC1 having been previously determined it is not at all difficult to subtract this known quantity from the titration with the sodium alizarin sulphonilic acid, the numerical value of which is in terms of decinormal NaOH, the remainder being the amount of organic acids and salts present. This determination has a rather unique clinical significance which will be discussed later. Now we determine the amount of the total acidity in terms of N-10 NaOH, and from this neutralization we subtract the sum of the free HC1 and the organic acids; the remainder represents the combined HC1. The amount of combination being in direct proportion to the peristaltic activity of the stomach. When the free HC1 and the combined HC1 are summed

up, at a glance we have the amount of acid which is the physiological endowment of the particular stomach under examination.

If you will permit me to digress for a moment, I will insert an illustration, which I think, is apropos.

Case 14027—Mrs. H. R., aged 41. Stomach trouble for seven months.

Organi	c Acids	Estimated
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1.	Free20°	
2.	Organic acids and salts32°	
3	Total acidity62°	
	Combined HC110°	
5.	Physiological HC130° or 0.11%	
Órganic Acids Not Estimated		
1.	Free HC120°	
2.	Total acidity62° or 23%	
3.	Combined HC142°	
4.	Physiological HC1—cannot be deter-	
	mined.	
3.	Total acidity62°	

After the organic acids have been eliminated, the total physiological HC1 (in above determinations) is only 30 or 0.11 per cent which is a hypoacid state, while if the organic acids are not estimated one is erroneously lead to believe that the condition is a state of hyperacidity. From the illustration above, it is clear that we may discover that a stomach secretion is hyperacid and at the same time exhibits a hypochlorhydria.

Also in the instance in which we have ascertained the acids of fermention, the combined HC1 is found to be just one half of the free HC1, and consequently we can assume that the peristaltic activity of the stomach is insufficient or its not vigorous enough to thoroughly mix the chyme with the HC1 which is being constantly secreted. In one determination the organic acids are found to be 32°, whereas 5° or 6° are usually considered the upper limits of the normal, for the testmeal contains this much organic material and some fermentation occurs even in the normal stomach, but we readily recognize 32° as an enormous fermentation. Now it remains only to determine whether the fermentation is due to functional dystrophy or to organic pyloric obstruction. By the non-determination method of analysis of the acids produced by fermentation, it would be impossible to say whether or not decomposition is present by scanning the results of a gastric analysis.

McCaskey (2), Refuss and other investigators have definitely demonstrated that the single Ewald test-breakfast withdrawn after one hour is no criterion of the state of gastric secretion, and that the chemical analysis of only one test-breakfast is not sufficient evidence upon which to base a true conception of the amount of free, combined, and physiological HC1 present in the

stomach under scrutiny. This has been proven by extensive experimentation with the fractional tube (3). But even then, if we do not test for the organic acids collectively, we will in no wise be able to embody in our histories, and laboratory data, the true amount of HC1 present which is physiologically active.

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CLINICAL TYPES OF HYPERTENSION*

HORACE W. CARLE, M. D., St. Joseph, Mo.

The title of this paper permits of great latitude, but it is my intention to dwell mostly upon hypertension as a clinical entity "per se" though touching upon the pathologic states in which hypertension is a striking and common factor. It has been my observation that as soon as a high blood pressue is detected the individual possessing it is immediately regarded as a nephritic and treated accordingly, or if the kidneys are not blamed he is regarded as an arterio-sclerotic, put on K. I. and a restricted diet and practically dismissed. It seems to me that more care should be made in properly diagnosing and classifying cases of high blood pressure for the treatment varies somewhat in the different types of hypertension and the prognosis is certainly dif-

Eliminating those conditions in which there is a transitory elevation of blood pressure as eclampsia and other acute intoxications I believe a fairly good working classification is as follows:

I. Essential hypertension.

II. Chronic intestinal nephritic hypertension.

III. Arterio-sclerotic hypertension.

IV. Combination of the latter two.

Out of twenty-four hypertension cases upon which I have devoted more than passing study, I find thirteen classed as essential hypertension, seven as nephritic hypertension and three as sclerotic type of hypertension. Of the essential hypertensions the highest tension recorded was 270 systolic and 135 diastolic and lowest tension 165 systolic and 100 diastolic. In age they ranged from 40 to 65 years—three were in the forties seven in the fifties and the remainder in the sixties. My nephritics ran from 21 to 60 years. The highest tension was 250 systolic and 130 diastolic and the lowest 170 systolic and 105 diastolic. In age my sclerotics ranged from 56 to 68 years, and the highest tension 264 systolic and 130 diastolic, and the lowest 164 systolic and 110 diastolic.

· Of the essential hypertension there are no mortalities that I know of. Of the nephritics one is dead and of the sclerotics two are dead.

The death of the nephritic was caused by uremia and of the sclerotics one died of an angina and the other of a cerebral hemorrhage.

This simple recital of my own meager statistics will, I believe, show at least the prognostic

value of a proper diagnosis.

The diagnosis of these different types of cases can, perhaps, be better shown by stating and commenting upon the history and findings of the various types.

No. 1. Mrs. M., Bedford, Iowa, aged 48.

Fam. Hist.: F, A. & W.; M., D. paralysis 56; B., 2 A. & W.; S, 2 A. & W.

Pers. Habits: Hard worker. Pretty good meat eater. Otherwise neg.

Past Ill.: Neg. No infectious diseases. Teeth and tonsils neg.

Mest. Hist.: Neg. and past monopause.

Pres. Comp.: Sleepless past several years. Headache—occipital in type-no vertigo—lacks pep-vague aches and plains in limbs and arms. N-2-3. Gas on stomach, constipated, very nerv-D-5-6 ous. Urticaria every month or so.

Phys. Exam.: Shows a well preserved woman of good color, seemingly the picture of health with physical findings negative with the exception of slight enlargement of the heart to the left and an accentuated aortic second sound. None of the palpable blood vessels thickened or sclerotic.

Blood Pressure: Syst. 210-180. Dias. 100. Mosenthal concentration test showed a urine with a spgr. ranging between 1.012 to 1.026 with no albumin. The night specimen ran about 360 c.c. The phenol-sulphone-phthalein test showed an excretion of 50 per cent in one hour and 25 per cent during the second hour with a total of 75 per cent passed in the two hours.

I think general arterio-sclerotic can be eliminated without further comment, so the diagnosis should rest between chronic nephritic and essential hypertension. Before commenting upon the evidence at hand it would not be amiss to freshen our memories regarding the functional tests used. The phthalein tests consists of injecting six millograms dissolved in 1 c.c. of H2O intra-muscularly at the same time emptying the bladder voluntarily or by catheter. At the end of an hour the bladder is emptied per catheter and the specimen obtained rendered alkaline by adding 10 c.c. of a 5 per cent solution of sodium hydrate and the percentage of phenol-sulphone-phthalein estimated by a colormetric comparison. At the end of the second hour the procedure is repeated and the sum of both equals the total amount excreted in two hours. This test I believe to all practical purposes regarded as infallible and the simpleness of the technique and the short time required to perform it makes it an easy and useful test for the clinician.

^{*}Read at Buchanan County Medical Society, June 4,

The so-called Mosenthal concentration test simply utilizes the well known clinical facts that a damaged kidney cannot pass a concentrated urine and in order to pass the necessary waste there is therefore a poly-uria which is especially marked at night. It is performed by putting the patient on full diet permitting fluids only at mealtime and collecting samples every two hours during the day and one specimen from 8 o'clock at night to 8 o'clock next morning. If some one of the daily samples shows a sp. gr. of 1.020 or above the kidney is regarded as being able to pass a concentrated urine and if the night specimen doesn't run over 450 c.c. or about 12 ounces it is not regarded as a poly-uria. Anything above 450 c.c. is regarded as a poly-uria. To my notion this is a very important and conclusive test being dependent upon the excretion of the metabolic products of the individual rather than upon the excretion of some one particular substance as in the P. S. T. test.

Referring back to the case cited it can be seen that both the phthalein and the concentration tests eliminate the kidney as being the prime actor for causing the hypertension in this case. Therefore the diagnosis of essential hypertension is made.

In most cases of primary hypertension a patchy sclerosis of some one of the groups of blood vessels or of the parenchymatous organs can be demonstrated and it has been assumed by some that the sclerosis is the cause of the hypertension, however, most authorities believe that hypertension was primary and the sclerosis secondary. As yet the true cause of hypertension is unknown, but it is a generally accepted belief that it is due to a circulating toxine of some sort or to the secretion of some of the internal glands, the adrenals most likely acting first by the way of the vaso motor constructors upon the arterioles resulting in a fibrosis and perhaps later a sclerosis. Intestinal toxines due to stasis have been largely blamed as causing hypertension; however, this has not been my experience. Most of my cases suffering with a colonic stasis and auto intoxication show a normal blood pressure reading, indeed one of my patients, a girl who has but two or three bowel movements a month and who suffers with headache, vertigo, anorexia and all those symptoms that spell auto intoxication by way of colon runs a relatively low pressure. Others place the blame onto heavy nitrogenous diet, but while I think this has its untoward effects, I do not believe it to be the essential cause. In a goodly per cent of hypertension cases a distinct heredity can be shown and it occurs often enough to make one regard it as being more than a coincident. At the present time I have under observation three sisters who are in the thirties, each of whom has a systolic blood pressure of 155 and not one of them has a

demonstrable kidney lesion. Oral sepsis and other focal infection are also blamed.

The hyperpietic as he presents himself is as a rule a robust healthy looking individual ofttimes practically symptomless. However, the following symptoms in a majority of the cases are fairly constant; occasional headache, usually of the occipital type, occasional attacks of vertigo, sleeplessness is common and a large number are conscious of a tumultous heart beat, perticularly when lying on the left side, minor digestible upsets are common as is a nycturia, once or twice a night. Nervousness is common, and most of them are really hardworking "high tension" people. Physically there is usually little to find, the pulse is hard and full, the heart practically always enlarged to the left and the aortic second sound accentuated. The urinary findings are not constant sp. gr. usually low and occasionally albumin and casts are found, but with it the function test showing a fairly normal kidney. The usual termination of these cases is by myocardial failure, angina or cerebral hemorrhage. While kidney undoubtedly must be damaged somewhat in a long continued hypertension it is seldom the cause of death as can be shown by statement of Meara, who says that out of 250 cases of essential hypertension under his observation there was not a death due to uremia with the possible exception of one.

The nephritic hypertension gives findings characteristic of impairment renal function, i. e., the patient will evince more profound symptoms, anemia is noticeable in contra distinction to the usually florid individual suffering with an essential hypertension. Various oedemas may be present and of course the renal impairment can be demonstrated by tests already mentioned.

I have a case of arterio-sclerosis of more than passing interest whose history I shall read:

Farmer, aged 65, family history of no importance, moderate user of alcohol and tobacco and a large meat eater. Past illness negative. When he came to me he complained of vertigo most marked on sudden change of position, feeling of fullness in head, bad taste in mouth, spitting of blood, weak, lumbar backache, tremor, headache, nycturia two to four, and feet swell toward evening. Physical examination showed sallow colored, poorly nourished old man, head negative except arcus senilis and very bad case of pyorroea. Chest—lungs occasional moist rales at base in back, heart apex sixth interspace anterior axilla line. Faint systolic murmur at apex, second aortic accentuated, second pulmonic loud and ringing. Abdomen negative. Radial and brachial arteries beady and sclerortic. Temperature normal, pulse 84. urin: sp. gr. 1.008, albumin marked trace, sugar negative, casts hyaline and granular. Blood pressure: systolic 264 and diastolic 130.

This, of course, is a frank case of general arterio-sclerotic with an arterio-sclerotic kidney and chronic myocarditis. The accompanying roentgenogram shows the degree of sclerosis of the radial and ulnar arteries.

The treatment of the nephritic and sclerotic types of hypertension is simply that routinely used in those conditions, i. e., rest and non-protein diet eliminates, etc. As to the essential hypertension I believe a good bit can be done, especially if the case is seen early in its course. I believe that if an early case is placed upon a proper diet, one low in animal protein and advised against over exertion and gets his regular hours of rest he can be rendered symptomless for a long time and sometimes the assent of the blood pressure may be arrested.

The treatment of a well marked case of hyperpiesia seems to me to depend more or less on the symptoms manifested although of course there is a general line of treatment applied to all cases.

As to the diet one should try to spare the kidneys as much as possible, restricting the amount of protein and eliminating salt and condiments. All patients should be advised against over eating. In the obese, and by the way obesity seems to be a great factor in elevating blood pressure an attempt should be made to reduce the weight by limiting the fat intake.

As to exercise, most observers believe that a moderate amount does more good than harm. Of course in a threatened apoplexy, angina or cardiac decompensation the patient should be put at rest immediately. I do not believe that an essential hypertension case should be regarded as an invalid and have his physical exercise limited too great a degree, in fact, most of them are so active that it is impossible to suppress them.

As to the bowels, I believe that a good daily evacuation is sufficient with perhaps a weekly purge with blue mass and mag. sulph.

Potassium iodide is a drug commonly used, but one which in my hands has not shown any particular effect. The nitrates may be used effectually in a crisis, otherwise there are no drugs which, to my knowledge, have any particularly beneficial effect.

High tension currents and hydrotherapy seem to give good results and are highly recommended by such men as Albibutt and Humphris.

Physicians and Surgeons Bldg.

For a sprain, wrap the part in flannel or absorbent cotton, saturated with camphor spirits. Nothing better.

From ten to thirty drops of the fluid extract of asclepias tuberosa is considered by some almost a specific for pleurisy, pneumonia and edema. It is an expectorant of the first order, invariably increasing the freedom of respiration.

THE BRISTOW COIL IN ORTHOPEDIC SURGERY*

W. EUGENE WOLCOTT, M. D., Omaha, Neb.

Those of us who were in the British Reconstruction Hospitals were taught that our first duty was to endeavor to conserve function, and second to prevent deformity. I think most of our men realized after a short time, that there was a tendency to be over-zealous in preventing or correcting deformity and to forget it was more important to secure function. I know it was necessary for Sir Robert Jones at the time of his weekly inspections, to repeatedly bring to our attention instances where good function had been secured even with a considerable degree of deformity present, and in other instances, to point out the lack of function in an extremity which had every outward appearance of being normal. He insisted that we appreciate the relationship between physio-therapy and function, as well as recognize the dangers always associated with over-zealous splitting. We received instruction in the methods of application of the simple, vet efficient standard army splints, most of which were new to us, and it was repeatedly demonstrated to us that it was just as important to know when a splint could be dispensed with. as to know when and how it should be applied. Great stress was laid on the importance of early mobilization and to facilitate this, a well organized physio-therapy department was established in every Reconstruction Center.

Bed patients had the advantage of bedside massage, active or passive motion and electrical treatment. Ambulatory cases received treatment in electro, physio-therapy or corrective gymnastics as indicated, and later as progress was made in the restoration of function, employment in the occupational therapy department was selected which would best encourage the use of weak muscles and bring into play stiff, disabled joints. As a result, the active cooperation of the patient was secured in shortening the periods of convalescence.

Because of the character of war wounds and accidents, there were a very large number of extremity injuries. These included fractures, trauma of the joints, muscles, tendons and peripheral nerves, of every degree and description. Naturally the treatment of such cases, aside from necessary protective support, would be directed largely toward, first, the prevention of muscle contracture by proper splinting; second, the prevention of muscle atrophy from disuse by electro and physio-therapy, and third, the preservation of joint function by a combination of early motion, electro-hydro and physio-therapy. In the first instance, the best insurance we have against

^{*}Read by invitation at the annual meeting of the Western Electro-Therapeutic Association, Kansas City, Mo., May 27, 1920.

muscle contractures is to restore normal muscle tone in the wasted group by muscular activity—graduated contraction. In the second classification muscle insufficiency is to be guarded against by bringing about normal muscular contraction, and in the joint group, muscular contracture, adhesions and atrophy must be prevented if we wish normal joint function; this is again accomplished largely by instituting treatment which will bring about normal, yet graduated and rythmatic muscular contraction. Methods of accomplishing this, especially in those cases in which voluntary control of certain muscle groups has been temporarily lost, is the subject I wish to bring to your attention.

The only way we have of bringing about muscle contraction in muscles over which the voluntary control has been lost, is by electrical stimulation. If the paralysis is due to a severed nerve supply, it will be necessary to employ the constant galvanic current, at least until the nerve supply has been restored either by surgery or natural recovery. In this way muscle nourishment and tone, can be to a considerable extent, retained until innervation is accomplished.

Muscles with an intact nerve supply may be stimulated to contract by the induced faradic current, no matter how wasted, even to a degree of loss of voluntary control, and it is in just such cases that electro-therapy is indispensable and brings about the most satisfactory results if properly used. Of course we all understand that the essential factor in producing recovery is brought about by the muscular contractions themselves, and not by the electricity per se-Muscular contraction is what is wanted to restore muscle tone, and with it, muscle function. Contractions brought about by electrical stimulation may be made to simulate very closely, normal physiological contractions if properly administered. Haphazard stimulation of muscle by ordinary battery currents, can meet with nothing but failures so far as muscular development is concerned.

To administer electricity properly to a muscle, the operator must have absolute control of the amount administered so that the muscular contractions may be exactly graduated both as regards degree and rythm.

In 1912. Bristow published a paper in the Lancet entitled "The Treatment of Muscular and Joint Injuries by Graduated Contractions," in which the Bristow coil and the technique of operation was described. This battery consists of a specially wound coil, the primary and secondary windings are both of very thick wire and the secondary, which is the current used, is so constructed that it can be tapped from either the first, second, or third layer, depending on the strength of current desired. It is important that the interrupter be regular in action and

that there is no spark visible at the make and The strength of the current is accurately regulated by manipulating a soft iron core in the primary coil. When this core is fully withdrawn, there is no muscular contraction even though the current is passing. Contraction begins as the core is introduced into the primary coil, the degree of contraction depending directly on the distance inserted. As the core is withdrawn, the current is decreased and the contraction passes off. Any degree of reaction may be obtained, from the slightest tremor of the muscle fibers to complete contraction of the muscle belly, tendon and movement of the adjacent joint. This control and graduation of contraction is the keynote of the method.

Technique of the Treatment by Graduated Contraction

The patient is placed on a low bed or table. the part to be treated is supported by sand bags or a firm pillow in a slightly flexed and relaxed position. The operator sits at the patient's right with the battery on a small table in front of him. Everything must be so arranged that he may work the core of the coil with the right hand and comfortably reach the patient's muscle with his left. The large indifferent electrode is placed in any convenient location, but in firm contact with the body surface. The small, active electrode is placed on the muscle over the motor point and the muscle substance is grasped, together with the electrode, between the thumb and first finger of the left hand. If the muscle is grasped along with the electrode, the operator can better appreciate and control the degree and regulate the rythm of contraction, especially is this important when treating wasted muscles. fracture cases, and acute sprains where only a very slight reaction is desired. The right hand gradually inserts the core, while the left appreciates the amount of contraction as described above.

The core should be inserted and withdrawn evenly and rythmically at the rate of about sixty or seventy a minute. It is important that the core be sufficiently withdrawn each time to permit the contraction to entirely pass off, otherwise the muscle will be kept slightly tetanized. This will cause wasting, as shown by experiment. The number of contractions desired at each sitting will depend largely on the character of the case and the condition of the muscle substance. The wasted muscle-groups are stimulated for a shorter period of time than one in which a normal contraction can be secured, and the actual contraction should always be submaximal. It is much better to do too little than too much, and experience in the handling of such cases alone, can furnish one with judgment as to the amount of treatment which will give the desired results.

The careful operator will notice that as the muscle begins to tire, that the character of contraction begins to change. Instead of the entire muscle contracting, one will notice that the contraction will be localized about the active electrode and that it is irregular and has more the appearance of a tremor than a normal response.

If during the treatment, the patient resists or moves, the core should be withdrawn and the treatment discontinued until the muscles are thoroughly relaxed again. This difficulty can be avoided, if the operator will take care to gain the confidence of the patient and overcome his fear of receiving an electrical shock, which is very unpleasant to most people. For this reason, it is best to demonstrate on a normal part, before

beginning the actual treatment.

As regards the point of stimulation. Broadly speaking, the point of maximum stimulation is at the motor point, and this point should be sought out if pure, individual muscle contraction is desired. If group contraction is sufficient, stimulation of the motor nerve direct will save Length of treatment will vary greatly with the case and object. If to prevent adhesions between muscle planes, one or two full contractions will be all that is necessary. The same is true if the treatment is directed toward preserving joint function. If treating wasted muscles, begin with from ten to twenty minimal contractions, and as the character of the contraction is noted to improve, the number and intensity of the individual contractions are increased. Ordinarily for muscle development, and to prevent atrophy from disuse, each individual muscle or muscle group is treated for from one to three minutes in rotation.

Indications for the Employment of the Bristow Coil

Perhaps the most urgent indication for the use of the Bristow coil is in those cases in which the patient has from one cause or another, temporarily lost voluntary control of certain muscles. Electrical stimulation, either by the galvanic or Faradic current, must be relied upon to produce the contractions which alone will prevent wasting and restore normal tone and function. It is impossible for a patient himself to exercise a muscle over which he has lost voluntary control. However, as soon as voluntary control is restored, the use of the Bristow coil may be discontinued and active exercises against graduated resistance begun. In the early treatment of fractures, sprains, peripheral nerve lesions, and during the post-operative care of tendon transplantation cases, the Bristow coil may be of the greatest assistance in preserving muscle tone during the prolonged periods of inactivity.

Fractures

We have for years been taught the successful treatment of fractures depends upon the execu-

tion of two great principles; first, the accurate reduction of deformity into correct alignment, and secondly, the prevention of a recurrence of that deformity by adequate splintage until union is secure. It is true that failure to carry into practice these axioms is, in the main, accountable for the many poor results met, but it is just as true that if these fractures are kept immobilized in splints until union is firm, the joints become stiff and muscular atrophy is extreme. Especially is this true if the fracture is in the neighborhood of a joint or actually involves it.

In all fractures there is injury to the surrounding soft parts. This varies greatly, ranging from actual separation of nerves and severe laceration of fascia and muscle layers in the compound fractures, to simple hemorrhage and stretching of muscles and ligaments in the less

severe cases.

If we are going to prevent adhesions between muscle lavers and fascia planes, tendons and their sheaths, scar contraction, joint cavity marginal adhesions, and capsule contractures as well as muscular wasting from disuse during the repair period, it is absolutely necessary that mobilization of the muscles and joints is begun early, and by early, I mean anywhere from the third to the tenth day, depending upon the character of the case. At first, as a rule, the patient has little or no voluntary control over injured muscles, but very satisfactory individual contractions can be produced by the use of the Bristow coil. Splints need not be removed and the treatment will be free from pain provided minimal contractions are first reduced. If the above suggestions are followed in conjunction with adequate splinting, atrophy, joint, tendon and muscle adhesions and contractures will be reduced to a minimum—a matter of real importance as affecting the period of time during which the patient is incapacitated.

Sprains, Acute and Chronic

Nothing like enough importance is given to the treatment of this condition. Not only are sprains very painful, but if severe, and improperly treated or neglected, as is often the case, the period of convalescence may run on for several months. On the other hand, if every sprain is regarded as a very serious affair and treated as such, complete recovery can often be obtained in a very short length of time, and the condition of chronic sprain, with its disabling adhesions and attending muscular atrophy, will be avoided.

Sprains may be for our convenience, classified into those involving joints and those involving muscles alone. Every sprain, excepting the most trivial, should be submitted to x-ray examination that an accurate diagnosis may be made. The percentage of sprains complicated. by fracture is much greater than generally sup-

posed and when present it is very important that they be recognized early if chronic invalidism it to be avoided.

Simple sprains should be treated by tight bandaging, to prevent swelling and the extravasation of serum about the site of injury. After the first twenty-four hours graduated contraction may be begun with advantage, thus restoring muscle tone and preventing intra-muscular adhesions, which, if permitted to form, are very painful and troublesome later. Adhesive strapping may be employed if definite ligament tears are present. These straps should be so applied that they will be effective in relaxing the torn ligament. Active motion and weight bearing should be encouraged as soon as possible, for with active use function is materially hastened, provided it does not retraumatize the injured tissues.

If, as a result of the injury, there are distinctly ruptured muscles, as the quadriceps, biceps, calf group, etc., it would be well to determine from the history whether such injury was caused by muscle contraction or outside violence.

If, due to over action of muscles, the condition will take a much longer period to heal than an injury caused by external violence and the danger of recurrence is much greater unless properly protected for a prolonged period, because of the wide gap at the site of rupture. A point in favor of treating such cases by graduated contraction is that every fibre is made to contract. This prevents intra-muscular adhesions and by putting the newly formed scar on a stretch during its formation, contracture is prevented and the scar tissue is reduced to a minimum, thus reducing the chances of a recurrent rupture.

In sprains about joints, it is very important to begin motion early to prevent marginal adhesions in the joint itself, as well as to keep up the muscle tone of the mucles about the joint. If muscular atrophy occurs about a joint, it becomes relaxed and unstable, a condition not easily corrected. This is especially true of a weight bearing joint such as the knee. A severe injury to the knee is followed by wasting of the quadriceps group. More especially the vastus internus. The knee joint is largely supported by the quadriceps group in front, and if it becames relaxed, lateral motion with its attending danger of nipping of synovial membrane and pinching of the cartilages is produced by any slight strain or miss step. This condition is often mistaken for some derangement of the internal structures of the knee joint and as a result many unnecessary operations are per-

If the real cause of the condition is recognized and the quadriceps group stimulated by

massage and graduated contractions until their normal tone is restored—the relaxed ligaments will be shortened and a stable knee joint result.

Peripheral Nerve Lesions

In peripheral nerve injuries the Bristow coil was used in the British hospitals to take electrical reactions which would assist in determining the location and extent of the injury.

During the long months of fixation awaiting the healing of wounds or to see if nature would repair the damage, joint adhesions and muscle atrophy contraction were prevented as much as possible by daily graduated contraction.

At the time of operation for plastic repair of the nerve injury, the active electrode was applied directly to the exposed nerve to assist the surgeon in seeking out the intact axis-cylinders which penetrated the scar neuroma thereby directing the dissection of the same from the uninjured portion of the nerve before suturing.

Muscles severed from motor nerve impulse can only be stimulated to contract by the galvanic current, but every two or three weeks the faradic current should be tried and as the response returns to this current, both the galvanic and faradic currents should be used.

Only a few muscle fibres respond to the faradic current at first, and for this reason the galvanic stimulations should not be given up in favor of the faradic until practically all of the fibres respond to the latter current. Electrical stimulation may be discontinued entirely when active exercises against resistance can be executed in every group by the patient.

Functional Cases

As an aid in the differential diagnosis between organic and functional nerve cases the coil was almost indispensable. Again in the treatment of the purely functional paralytic cases as well as the malingerer, the results were frequently little short of marvelous. The psychical effect of a patient himself seeing muscles which he had thought paralyzed, contract and produce motion, seldom failed to excite interest and secure the hearty cooperation of the patient so necessary in the treatment.

To restore function in this particular class of cases it is necessary to bridge the gap which exists between the muscle substance and motor nerve endings as a result of muscular inactivity. Diminished muscular activity results in diminished muscle tone and this in turn in diminished irritability, hence the muscle fails to respond to normal, minimal stimulation. Through lack of function, the volitional impulse transmitted over the motor tract becomes subnormal. Thus we have two factors which tend to prevent normal function: first, diminished irritability on the part of the muscle to stimulation; second, diminished conductivity of the motor tract.

If by stimulating muscle with the Bristow coil, contractions are brought about thereby restoring the muscle tone, the irritability of the muscle will be increased to the point where the subnormal motor impulse becomes sufficient to again produce a contraction. Through repetition of this treatment plus active muscle training, the conductivity of the motor nerve is increased, the normal irritability of the muscle substance is gradually regained, and voluntary control is restored.

Post-operative Care of Tendon Transplantation Cases

Transplantation of active tendons into those paralyzed from whatever cause, should only be done when it is absolutely certain the paralysis is permanent and not until contractures and joint adhesions which might mechanically hinder the activity of the transplanted tendons are largely overcome.

If the operation is going to be successful, motion must be secured in the transplanted tendon at the earliest practical time after operation. This can be secured best by direct electrical stimulation of the motor point of the transplanted muscle or muscles by the Bristow coil. After two weeks the union at the site of suture should be firm enough to withstand a sub-maximal contraction. The degree and number of contractions are daily gradually increased until the normal is reached or until re-education has gone on to such an extent that effective active contractions against resistance can be satisfactorily accomplished.

Since my return to civilian orthopedic practice, I have found the Bristow coil of great service in assisting to make a differential diagnosis in back injuries.

In such cases, it is very important to differentiate between purely soft part injuries and those affecting injuries to the articulations themselves.

I have found that by systematically contracting the various muscle groups in rotation, I have been able to outline definitely the particular muscles injured at the time of accident.

With this definite knowledge gained, strapping or support can be more effectively applied which will protect and relax the injured structures.

This protection combined with graduated contractions, beginning with the minimal and gradually increasing the degree of contraction until full normal contraction produces no discoffort constitute the most ideal treatment which could be offered. It is the small inter and intromuscular adhesions which are accountable for the chronic invalidism so frequently seen as a result of ordinary back sprain.

830 City Nat. Bank.



FROM OUT OF THE DARKNESS

By Guy Bogart.
From out of the darkness one came to me
Bearing the light.
Youth merged into manhood
With the way still dark,
Except for lightning flashes flying,
Dead in moment of their birth.
And I knew not where to seek,
Till Lucy came—
Gave direction to my life—
When love and light
From out the darkness came to me.

The doctor's greatest allies are love and womanhood. Or are they one?

It is a woman's anguish which heralds the new life, and a woman's tear that drops last upon the stilled clay.

Am I different from my beloved friends of the medical profession when I say that the stages of my life career may be measured by the women whose paths have crossed mine—down to that bright hour when the queen of women chose the same path that I was traveling and we have gone the way hand in hand?

The masculine nature is positive, intellectual. The feminine is intuitive in the main. The true physician is he who is not all intellect, but that man—not ashamed of the traits given to the race by its milleniums of motherhood — Intuition. The diagnosis is not entirely a matter of the skilled brain—tho no brain can become too acute for the daily decisions of life and death. The prescriptions should be headed, instead of the usual sign, by the symbol "L"—meaning love.

usual sign, by the symbol "L"—meaning love.
"Soft as a woman's touch"—how often have I heard this description applied to the physician. I have seen the cold man of science in the sick room casting a gloom over the household. And I have seen the man of equally skilled science plus the heart made vibrant with memory-deeds of wife and mother. Which man will heal and help to the greatest degree?

The race has walked into darkness. Materialism and physical accomplishments—man's proud contribution to civilization—have brot the race to the brink of a precipice. I hear the voice of woman, made wise thru centuries upon centuries of intuitive stress, bidding the race pause ere its fatal plunge. I see this womanhood leading the masculinity of the race in safety to the vales of repose.

And medicine is swinging into line with the world-changes. "A little child shall lead them," but a wife-mother's hand shall clasp the hand of the racial fatherhood and keep it in the pathway marked out by the children of the New Race springing up in our beloved America.

Continuing "The Medical Fortnightly and Laboratory News."

The Medical Herald

and Electro-Therapist

Incorporating the

Kansas City Medical Index=Lancet

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Vol. XXXIX

October 15, 1920

No. 10



Doctor or Poet?

Shall there be the name of a doctor placed upon the scroll of honor in the Hall of Fame this year? Since 1900 that question has been None yet. Has the glory faded from asked the name of Pepper who stirred the people of Philadelphia, who wrung from the legislature great appropriations for the University of Pennsvlvania, always when he spoke? Has the fame of Gross waned into a dim shadow? He who thrilled the world with his wonderful surgery? Or McDowell, is he forgotten completely, the pioneer in all this wonderful abdominal work? Is the name of Gorgas ever to be forgotten? He whose name is synonymous with Cuba, Panama canal? Are these names outranked by a writer of prose or a few poems? The question suggests itself as to what the requirements of enrollment may be, pleasing the multitude, or for constructive work which has made possible empire building. Is it not a strange inconsistency that the family doctor should occupy such a lofty place in the hearts of his people, yet be forbidden to voice his wisdom in the cabinet of the government, and ignored in the distribution of laurels? Let us all vote as suggested by Nujol, and have the name receiving the most votes presented as the unanimous vote of the American profession. Let us see justice done to our forebears, and honors awarded to those whom we have loved.

I. M. B.

Team Work

Making a diagnosis by a team of specialists who report the objective conditions of the various organs and systems of the body is fraught with a mishap once in a while. The internist who presides over the various reports, must, as heretofore, still be a keen clinician. As our patients advance in years, many of the special organs show some changes which are not exactly normal, and the clinician must be able to give them their true value or eliminate them from the making of a diagnosis. It requires the study and survey of the body as a whole.

Barker says that to be a good diagnostitician one should be endowed with a strong instinct of curiosity with its associated emotion of wonder, and its accompanying impulse to approach and to examine more closely the object that excites it. This can be cultivated to some extent. A short time ago a single symptom, the complaint of the patient, sufficed for the making of a diagnosis by certain physicians.

The following is extracted from some remarks by Dr. Arthur Dean Bevan at a conference on Medical Education: "A few weeks ago a man came into my office and said he had been to a great clinic where they practice group medicine in the best possible way. He was an intelligent man. He had been put through a machine. He said: 'Doctor, I went there, and I was most carefully examined for a week. They x-raved my teeth; they x-rayed my chest, my stomach and my intestines. They made an examination of my blood; they took what they call a Wassermann test; they made an examination of my feces and of my urine. They made an exhaustive and thorough examination, and when they got through they said: Well, Mr. So and So. we cannot find anything wrong with you. You go back home; you are run down; you need to eat more and not work quite so hard.' This man was excited; he pulled out his handkerchief and with a trembling hand wiped the perspiration from his forehead, and remarked: 'Doctor. I have lost fifty pounds, and I am so sick that I cannot do my work.' This man had been through a machine and did not have the benefit of the personal element in medicine. He had a marked exophthalmic goiter without any visible goiter. The diagnosis was made in an instant by a clinician who had personal control of the situation, the minute the man took his handkerchief out of his pocket and wiped his forehead.

and said he had lost fifty pounds and could not do his work, the diagnosis was clear. It is in personal element that the art of medicine comes and is something we cannot get away from. Again medicine as a profession in this country is a means whereby about 150,000 men earn a livelihood. Our problem is not a simple one, but I think will be work dout."

P. I. L.

Next? No. Tobacco Tabooed

A most fair and comprehensive presentation of the question was recently published by the Medical Record, Jan. 31, 1920, in an article by W. A. Bloedorn, A. M., M. D., lieut, commander, Medical Corps, U. S. Navy. Every habitue of the "baneful" weed and every devotee of dear old Lady Nicotine must read the article. Dr. Bloedorn presents beautifully the romantic and indulgent side of the question. Yet on the other side what may be said in the way of indictment that cannot be covered by temperance. There is a monotony in life which demands an offset, a balance, supplied by a little caffeine, a little nicotine, a relaxation after the meal, at the end of the day, after the high tension of business hours, after the strenuosity of meeting and pleasing the public.

Yes, there are those who smoke too much. Each one must know his limit. There are those who study too much, who eat too much, who work too much. *As the celebrated Spurgeon, a famous London LL. D., said, "When I have found intense pain relieved, a weary brain soothed, and calm, refreshing sleep obtained by a cigar, I have felt grateful to God, and blessed His name for it."

J. M. B.

Sterilizing the Seminal Vesicles With Mercurochrome 220

Dr. Nelse F. Ockerblad, of Kansas City, makes the following interesting report, in the October issue of the Journal of the Missouri Medical Association:

Apropos of mercurochrome 220 (dibrom-oxymercury-fluorescine) for use in the attempt to sterilize the seminal vesicles in cases of chronic vesiculitis due to gonorrhea. Since the announcement by Young, White and Swartz, of this new antiseptic for use in the genito-urinary tract it has been widely used in the various infections from gonorrhea to pyelitis. Taking the sugestion from Dr. Elmer D. Twyman, who had injected this substance into the vas of a patient with an epididymitis with good result, I began to use this dye compound in the place of the usual argyrol. At first I proceeded rather cautiously, having in mind some of the cystitis

patients who complained bitterly of the pain caused by the instillation of a 1 per cent solution of mercurochrome 220 into the bladder. We had already tried the now discarded acriflavine for vesicular injection through the vas but found it entirely too irritating. We used the modifi-cation of Belfeld's method described by Thomas. I have now injected the seminal vesicles of twenty-five patients suffering from chronic vesiculitis of gonorrheal origin. Not one has complained of the slightest pain either during the injection or afterwards due to the presence of the drug in the vesicles. Solutions up to 2 per cent were used. The dye has been observed tinging the urine six weeks after its injection. At first one has a little difficulty in the use of this red substance, for because it is so nearly the color of blood, a drop of it spilled on the vas or the surrounding tissues obscures the field and of course cannot be sponged off.

The few epididymitis cases that we have injected by directing the needle downward toward the epididymis have done exceedingly well and we are encouraged to do more of them. From our experience thus far it is a safe substance for use in the seminal vesicles and the results are far superior to those obtained by any other substance that we have yet tried.

It is hoped that this brief report will stimulate others to apply mercurochrome in this manner so that we may soon have a sufficiently large number of cases from which to make a complete study.

Vote for the Missouri Amendments •

Every physician should be interested in the effort to procure for the state of Missouri a new Constitution, to take the place of the one framed in 1875, just following a panic and now restricts development; it breeds waste of taxes by barring a state budget system; it has made Missouri rank thirty-fourth in education by crippling the rural school districts; it is silent about modern conditions of public health and child welfare and makes no provision for courts of domestic relations or juvenile courts or proper jurisdiction; it delays justice, the supreme court being about two years behind its docket owing to constitutional provisions; it disfranchises Missouri soldiers, sailors and marines, denying the ballot to men ready to lay down their lives for the nation; it keeps Missouri in the mud, making impossible any comprehensive good roads program except by changing its obsolete terms. In short, our present Constitution is a disgrace to our state..

Amendment No. 2 gives Kansas City the right to frame a charter along modern lines. The present charter is obsolete.

^{*}Temperance is a word the application of which may not be monopolized by vicious habits.

Amendment No. 3 gives cities of over 100,000 people the right to vote bonds for needed public improvements. These cities are fast outgrowing present facilities and need immediate relief. The present bonding power of these cities was established many years ago and should be revised in keeping with present day conditions.

Amendment No. 6 applies to good roads. "Lift Missouri out of the mud!"

Amendment No. 8 provides for a system of taxation to enable the state to assist the blind. The legislature has twice passed the bills appropriating funds to help the blind but in each instance the bills were vetoed because of insufficient funds in the state treasury to meet the cost of giving the blind this very worthy help.

Vote for the new Constitution at the next election.

Medical Association of the Southwest

The fifteenth annual meeting of this association will be held at Wichita, Kas., November 22-24, under the presidency of Dr. E. E. Day, of Arkansas City, Kas. The association is composed of the states of Missouri, Kansas, Oklahoma, Arkansas and Texas. Clinics will be held each morning, and papers read in the afternoons. The Wichita profession is making preparations for a large attendance, and a cordial welcome is awaiting you. Headquarters at Hotel Lassen. Rooms should be engaged in advance. For program write the secretary, Dr. Fred H. Clark, Oklahoma City, Okla.

"Red Tape" in Liquor and Narcotic Laws—At the opening session of the National Association of Retail Druggists recently held in St. Louis, plans were suggested for the elimination of the "red tape" involved in the handling of narcotics. Among other points noted it was brought out that a druggist, in filling a prescription for whiskey, is required to sign his name forty-two times and that alcohol can only be obtained sixty days after application is made. It was stated that the regulations governing the sale of narcotics are so complicated, and change so often that druggists never know when they are complying with the law.—Med Record.

No Whiskey in the Navy—By an order recently issued by the Bureau of Medicine and Surgery, the U. S. Navy medical supply depots are prohibited from issuing whisky except to hospitals. When the present supply becomes exhausted no further purchase will be made and whisky will be stricken from the supply table of the medical department of the Navy. It is estimated that the supply now on hand will last not more than two or three weeks.

Current Comment

A Test of Courage—Courageous physicians judging at the 1920 baby show in Hutchison dared to be quoted in the News, saying they found no perfect baby. They did add in extenuation they found one which rated 99.5. Hence one mother will lack five-tenths of 1 per cent of being their friend and the rest probably won't speak to them.

An All-American Health Conference—The first of a series of regional health conferences authorized by the International Health Conference in Cannes is to be held in Washington, D. C., December 6-13. It will be devoted to a consideration of venereal diseases which, according to concervative estimates, constitute one of the world's most terrible plagues.

Sanatorium for Tuberculous Soldiers—The tuberculosis sanatorium heretofore operated by the army authorities at Fort Bayard, N. M., has been transferred to the U. S. Public Health Service and will soon be available for treating discharged, disabled soldiers. Splendidly located, not far from Silver City, and conveniently accessible on the Santa Fe Railroad, this sanatorium has long been the pride of the army. The climate is almost ideal in that it permits outdoor life for a large part of the year.

Precautions Abroad—Orders have been issued by the United States Public Health Service to all officers in Europe to permit no third class passengers to depart for the United States without having been vaccinated against smallpox. Dr. Rupert Blue will remain in Paris all winter for the purpose of perfecting the organization of the health service, with an office in every large port in Europe, in order to minimize the danger of smallpox, typhus, and other diseases being brought to this country from overseas.

Tuberculosis Committee-The St. Louis Tuberculosis Society has appointed a medical advisory committee, for the purpose of coordinating the efforts of medical practitioners and institutions in the control of tuberculosis, consisting of Dr. Louis P. H. Bahrenburg, U. S. P. H. S.; Drs. Louis Boislinier and Lawrence Schlenker, Mount St. Rose Hospital; Dr. Seelig Simon, Jewish Home for Chronic Invalids; Dr. M. D. Dwyer, Koch Hospital; Dr. E. L. Opie, Washington University; Dr. O. H. Lamb, St. Louis University; Dr. James Stewart, board of education; Drs. Jacob Jesse Singer and Adolph M. Frank, Washington University Clinic; Dr. A. E. Henske, St. Mary's Hospital, and Drs. Samuel T. Leipsitz and Adelheid Bedal.



Radium Treatment of Cancer of the Esophagus Under Roentgen-Ray Control

The action of radium on malignant tissue is discussed briefly by Drs. R. W. Mills and J. S. Kimbrough, St. Louis (Journal A. M. A., June 5, 1920), and its use in cancer of the esophagus in greater detail. The problem offered by carcinoma of the esophagus is quite different from that of other malignant conditions in which favorable results have been obtained. The exact thickness of the tumor is unknown and usually not uniform. Not only is there no surrounding tissue of a protective nature, but instead, the thin-walled esophagus is in contact with vital structures whose devitalization may lead to ulceration and perforation. The situation of cancer of the esophagus renders exact centralization of application and protective procedures mechanically difficult. Esophagoscopy has heretofore been utilized by some to accomplish certain ends, but the use of the roentgen ray is preferred by the authors. An initial roentgen-ray study of the position and physical peculiarities of the tumor is made by both screen and plate, a simple mixture of bismuth subcarbonate in water being used as a means of visualization, and, when the stricture is not great, bismuth suspended in artificial buttermilk. The patient is given a preliminary injection of morphin and atrophin onehalf hour before the radium treatment is begun, the dose obviously as indicated. It is impossible to overestimate the value of this procedure in quieting the patient and making the endurance of a six-hour application possible without undue suffering. Occasionally, in marked strictures. a spoonful of olive oil one-half hour before treatment is helpful in relaxing secondary spasm. Preliminary bouginage is occasionally useful. The radium enclosed in a container composed of German silver 0.5 mm. in thickness and further filtered with 05 mm. of brass and a thickness of rubber is mounted as a terminal on a slightly springy drawn silver wire encased in a rubber tube. It is introduced after the matter of an ordinary esophageal sound. The wire applicator or stomach tube bearer is anchored by means of a bridle bandage about the patient's head. The radium is left in situ for six hours at each initial treatment. Cases were treated on from one to seven occasions. The frequency and number of treatments and the length of other than the initial treatment was occasionally varied somewhat to meet individual indications, also as much as was thought advisable in an effort to determine the most effective procedure. Nearly all the authors'

work has been done with 50 mg. of radium element. The immediate results of the treatment were in most instances beneficial, sometimes strikingly so as to the relief of the dysphagia. No case treated failed of improvement in this regard. The improvement in several was almost immediate, within twenty-four hours, possibly owing in part to a bouginage action of the radium capsule. A gain in weight occurred in most cases. In several cases there was a return in a degree of the dysphagia, usually relieved by another treatment. The reestablished dysphagia in some instances seemed of the nature of intermittent spasm. Eleven cases are cited.



Judging before time — prejudice — who escapes

When the emotions sway the crowd, few can resist their influence.. War time!

This is an age of industrial feudalism and who can make it democratic? Capital or labor?

We owe everything to heredity and environment, and there are no "self made" men, except egotists.

We found the following editorial: "The physician heals by what he is rather than by what he does." Suggestion.

Tolstoi teaches that property is at the root of all evil, and when the shepherd tribes settled down the cattle became "capital." Stored up labor.

A young woman appears on a bathing beach or at a ball in a costume she would not dare to wear on the street.—An item of a few years ago, but now—.

Cigarettes properly boiled make a good decoction for killing sheep ticks, vermin, lice, bugs, and make an excellent dip for poultry and pigs. Ay, what?

Some men do not hesitate to make false declarations of their incomes, taxable properties or dutiable articles brought into the country. Sure honest.

When a psychopathic patient enters, the doctor considers him or her a bore, and time consumer, and often forgets his true occupation to at least give consolation.

A Chicago lawyer says a physician is almost exclusively occupied with his cases; if not, then he is talking to a colleague about them, and knows next to nothing about the outside world, and is a notorious investor in gold bricks.

Some laws on the statute books are a dead letter.

"Everybody does it"—we are slaves to convention.

Did you ever stop to think there is no present? Each moment succeeds another.

A normal person is an abstraction. There "ain't no such animal." We are paranoiacs.

Near the international border smuggling is legitimate, as long as you do not get caught.

With the advent of laboratory diagnosis the human factor in practice waned. Is it not too materialistic?

A surgical operation does not complete the treatment of patients; in most cases the internist is called upon to do this.

Freudian psycho-analysis has discovered some interesting things by totally discarding good sense and delicacy.—Shaw.

How about the Master's admonition to "turn the other" when smitten on one cheek? Not affected by prohibition as yet!

Some people feel justified in making their own liquor, while some of our "big ones" defeat the law and live like princes. But no happier.

St. Paul's admonition to Timothy to "drink no longer water, but use a little wine for thy stomach's sake and thine often infirmities," has been greatly revised in our land.

No doubt all revolts against nature show a certain want of what is called good sense in the rebels. But good sense is an inhibition which suppresses vital influences as well as deadly ones. ---G. B. Shaw.

The supposed benefit of a gastro-intestinal antiseptic is due to catharsis, and antiseptic or germicidal soap depends on the soap and not on the antiseptic or germicidal properties of the chemical for their efficiency.

Hare says: "Laboratory investigation, by the brilliancy of its results in obscure cases, has served to divert attention from the careful study of the patient which is usually the chief method by which a correct diagnosis can be made."

Here is a frequent specimen of reasoning that all will recognize: "Well, he helped me and it makes little difference to me and my family under what system he practices. The proof of the pudding is in the eating and there you are."

Heart disease caused more deaths in 1917 than any other ailment (115,337), says the United States Public Health Service. Right living would materially reduce this. Don't wait for the disease to develop before you see your physician.

P. I. L.

Che Doctors' Library

"Next to acquiring good friends, the best acquisition is that of good books."—C. C. Colton.

ESSENTIALS OF MODERN ELECTRO-THERAPEUTICS--An elementary text book on the scientific therapeutic use of electricity and radiant energy. Second edition, by Frederick Finch Strong, M. D., lecturer in electrotherapeutics at Tufts College Medical School, Boston. Rebman Company, 141 W. 36th street, New York. Price. \$2.50.

This is a book of 145 pages with 102 illustrations. and is as its title indicates, a text book on the elementary principles of electricity. It contains chapters on Modern Theories of Matter and Force. Principles of Electro Physics, Physiology from an Electrical Standpoint, Galvanism, Faradism, Electro Diagnosis, Static Electricity, High Frequency Currents, Roentgen Rays, Dental Electro-Therapeutics, Sinusoidal Current, Indirect Uses of Electricity and Special The author makes no pretension to Therapeutics. cover the entire field of electro-therapeutics, but to the student in electro-therapy and to the busy practitioner who desires the acquaintance of the elementary principles of electricity, the book will supply much needed information. B. B. G.

SEX AND SEX WORSHIP (Phallic Worship)—A scientific treatise on sex, its nature and functions, and its influence on art, science, architecture, and religion, with special reference to sex worship and sympolism, by O. A. Wall, M. D., Ph. G., Ph. M., author of "Handbook of Pharmacognosy." "The Prescription," "Elementary Lesson in Latin," etc. 372 illustrations. St. Louis: C. V. Mosby Company, 1919. Price, \$7.50.

The author, after much time, labor and expense. gives us a broad comprehension of Phallic worship. and the influence sex has had upon life in past generations. The vast amount of collection and compilation represented herein is commendable and far out of proportion to the value of the work will have on society. Such a vast mingling of religion, art and physiology as is contained within the covers of the work gives one a broader conception of the intracacles of human nature, but of the baser sort, away from which man is presumed to progress. The human figure in its beautiful lines, is considered the most wonderful type of art, but not when viewed from its sensual side. As a work of archeology the volume has value, but the question persists, to whom is it dedicated, what class of readers are expected to buy it, physicians, the neurotic or the curious? good purpose does it serve, beyond informing man of the terrible depth of licentiousness to which his ancestors descended? In the hands of the average reader the book will work incalculable harm, while to the medical man nothing new is presented except to realize more keenly the detestable religion of the ancient Canaanites, whom Jehovah declared unfit to occupy the land of whom Israel was ordered to completely destroy. In spite of the vast labor, literary effort and expense involved, it is a book which will probably never call for a second edition, nor will it assist in elevating mankind toward that sphere of altruism of which we love at least, to dream.

NOTE—The Medical Herald's Kansas City office will supply any book reviewed in this department at publisher's price, prepaid. We can also supply any book by any publisher in the world. If an order for two books be sent at any one time, the purchaser will be entitled to a six months' subscription to the Herald. This plan is arranged for the convenience of our readers, and we trust it will stimulate trade in the direction of good books.—Editor.



KINDNESS

If only all of us were kind
In thought and action, we would find
This world would more of joy suffice
Than any dreamed of paradise.
No traveler would find his way
A weary way; no toiler's day
Would end in bitterness or pain
From feeling that it was in vain.
No grief could come but it would bring
True sympathy to heal the sting,
And every sorrow would be shrined
In sweetest thoughts, if all were kind.

If only you alone were kind
In thought and action, you would find
Full half the grievances you feel
Are all unfounded and unreal
For things most beautiful and good,
By unkind eyes misunderstood,
Appear so full of base alloy
The gazer misses half their joy.
Full half the happiness you know
From your own heart must overflow
And fill with sweet your heart and mind
Or else your world will seem unkind.

-Lee Shippey.

LIKE A LITTLE BIT O' DAWN

A little bit o' baby, sleepin' when the night is gone, Sort of makes me feel like God had left a little bit of dawn.•

Left a little bit of heaven lyin' on the baby bed;
And I watch the little tousles stirrin' on the baby head
As the summer breezes kiss them, and I sort of stand
and think,

Lookin' at the sweetness of it lyin' cuddled up and pink,

That of all God's gifts the sweetest and the dearest and the best

Is a little bit of baby we kin hold ag'in' our breast.

Just a little bit o' baby, born of sun and sky and dew, Like a door had been left open and an angel had slipped through

And left just a bit of heaven for our lovin' and our care,

When its hands like rose leaves lyin', and the breezes in its hair;

And the world must be made better, be made better right away,

So the angel that has left it will be glad to let it stay; So that always at the nightfall when we snuggle it to rest

We can clasp it tighter to us and feel we've done our best.

-Judd Mortimer Lewis, in the Houston Post.

T. B., M. D., N. G.

A weak, sentimental M. D.

Had a patient with early T. B.

He called it a "cold"

And the lie that he told

Catalogued this M. D. as N. G.

—Bull. Kas. Health Board.

IN MISSOURI

LeRoy Huron Kelsey, Kansas City, Mo.
The sunshine is the brightest—in Missouri;
Life's burdens are the lightest—in Missouri;
The summer skies are bluest,
Disappointments are the fewest,
And the friendships are the truest,
In Missouri.

Cornstalks grow the tallest—in Missouri; Crop troubles are the smallest—in Missouri; The landscapes are the fairest, While the products are the rarest, And the people are the squarest— In Missouri.

The span of life is longest—in Missouri;
The love of right is strongest—in Missouri;
The minds of men are keenest,
Where the grass is always greenest,
And the living is serenest—
In Missouri.

The larks can sing the sweetest—in Missouri;
Contentment is completest—in Missouri;
The damsels are the dearest,
And their smiles are the sincerest,
So that heaven seems the nearest—
In Missouri.

WHAT MATTERS

How happy I shall be, O mother mine,
If only, after our hard fight is won,
My part, though small, shall license you to speak
With pride of him who is your son.

It matters not if I am at your side
To comfort you and ease your ripening years,
For though you grieve the loss of him you loved,
Pride, then, will quickly vanquish sorrow's tears.

It matters only if midst shrapnel's scream,
And bullets, gas and ravages of Hun,
That I whom you have reared with tender love,
Shall live or die as you would have your son.
—Corp. L. H. Pillion in the Stars and Stripes, France.

THE SPRING THAT COMES TO FLANDERS

The spring that comes to Flanders Goes by on silent feet, Lest they should wake, remembering How once the spring was sweet.

And streams that flow in Flanders
Past poppy-field and hill
Are silver streams and shining,
But thoughtful streams and still.

The wind that blows in Flanders
Across the listening air,
Is gentle with the grasses
That bend above them there—
And rain that falls in Flanders
Is tender as a prayer.
—David Morton, in Good Housekeeping.

COULDN'T AFFORD IT

"A long walk will give you a fine appetite."
"That's the reason I'm sitting still," replied Mr.
Growcher. "I can't afford a fine appetite."

Every Day Dionol Results

Small wonder that doctors everywhere use DIONOL more and more. The results are decidedly unusual. Send for literature giving scientific rationale. Many other results equally gratifying are given.

THIRD DEGREE BURN

Send for reprint of this remarkable case which Dr. L. voluntarily sent to a prominent medical journal, after healing these unusually leep burns with Dionol. Many other well known remedies were used in vain for months.

VARICOSE ULCER

Dr. M. writes: "Where can I procure Dionol in Philadelphia? Have just cured a case of varicose ulcer with same."

CHRONIC LEG ULCER

Dr. C. writes: "I have completely cured a chronic ulcer of the leg in six weeks with Dionol. Several other doctors failed in this case. Never saw a nicer result."

THE DIONOL COMPANY

(Dept. 27)

CARBUNCLE

Dr. W. writes: "That case of carbuncle I ordered Dionol for cured it in great shape, and I received the fees and many bouquets. Thanks to Dionol."

INFECTED WOUND

Dr. C. writes: "A shrapnel wound in the foot of a Canadian soldier had failed to heal under any other treatment. Naturally I had little hopes of helping him. So gave him some Dionol temporarily, with instructions. Sometime after he came in and showed me that Dionol had healed the wound completely. No use saying I was surprised."

DETROIT, MICH.



BUCHANAN COUNTY MEDICAL SOCIETY

The regular meeting of the society was held September 1, 1920, at the Dr. Woodson Sanatorium. About ninety were present as guests of Dr. C. R. Woodson for dinner. Rabbi Louis Bernstein made the address of the evening.

The meeting was made a social session, and Dr. Woodson again invited the members to dinner one year hence, after the 1921 vacation interim.

Adjourned 10 p. m.

The regular meeting of the society was held at the Commerce Club rooms, September 15, 1920. Dr. C. R. Woodson was chosen president pro tem, the other officers being absent.

A motion to consider the business carried over the vacation interim prevailed.

Dr. L. H. Fuson, Seventh and Edmond streets, was duly elected a member of this society.

The application for membership of Dr. O. A. Bandel, 309 P. and S. building, was read and delivered to the censors.

The following bills were allowed and warrants ordered drawn for payment of same:

Lon. Hardman\$	61.65
O. C. Gebhart, secretary	5.00
Stuppy Floral Co	6.00
Scientific session:	

Dr. C. R. Woodson presented the subject "Recognition of the Early Manifestations of Diseases of the Central Nervous System" (part two). Discussion by Drs. Leonard, Bansbach, Lau and Willman.

Dr. P. I. Leonard read a paper, "Hospital Standardization." Discussed by Dr. Elam.

Adjourned 9:50 p. m.

Attendance 41.

OLIVER C. GEBHART, Secretary.

FIFTEENTH ANNUAL MEETING OF THE MEDI-CAL ASSOCIATION OF THE SOUTHWEST, TO BE HELD AT WICHITA, KANSAS, NOVEMBER 22, 23 AND 24, 1920

The coming meeting of the Medical Association of the Southwest will be the fifteenth annual gathering. As the years have gone by, these meetings have been constantly growing in strength and attendance and though the secretary was away two years in the army, the interest was sufficient so that no meetings were missed.

The first day will be given over to a reunion of the medical officers called to active service from this district during the war. This is a purely social gathering and does not have any scientific program: there are so many societies of one kind and another that at the last annual meeting of the association it was voted not to make any attempt to organize a military branch, but the secretary was authorized to select two ex-service men from the city where the meeting is to be held and they with him will constitute the committee of arrangements and make such plans for the day's entertainment as they may see fit

The
Management
of an
Infant's Diet

In extreme emaciation, which is a characteristic symptom of conditions commonly known as

Malnutrition, Marasmus or Atrophy

it is difficult to give fat in sufficient amounts to satisfy the nutritive needs; therefore, it is necessary to meet this emergency by substituting some other energy-giving food element. Carbohydrates in the form of maltose and dextrins in the proportion that is found in

MELLIN'S FOOD

are especially adapted to the requirements, for such carbohydrates are readily assimilated and at once furnish heat and energy so greatly needed by these poorly nourished infants.

The method of preparing the diet and suggestions for meeting individual conditions sent to physicians upon request.

MELLIN'S FOOD COMPANY,

BOSTON, MASS.

Dr. F. M. Pottenger of Morovia, Cal., and a representative of the U. S. P. H. S. will be the guest of honor at this gathering and will deliver addresses on Tuesday evening at the general session.

The profession of Wichita have made great preparations to have some very interesting and instructive clinics in each of the hospitals on Tuesday and Wednesday forenoon, so the sessions for the presentation of papers will be confined to Tuesday and Wednesday afternoons and Tuesday evening.

All who attended the meeting held at Wichita some years since will remember the splendid entertainment arranged for the ladies and will without doubt want to bring their wives with them again this year for the Wichita profession promise to repeat and add to what was done when we were there before.

The scientific program is already assured of a number of very interesting papers by able men and the various supply houses have promised an unusual exhibit, so on the whole, everything looks toward the holding of the largest and most enthusiastic meeting we have ever held.

Headquarters will be at the Hotel Lassen and reservations should be made at once. Fred H. Clark, Secretary, Oklahoma City, Okla.

CURRENT DIAGNOSIS

Phrenologist—This large bump running across the back of your head shows that you are inclined to be curious to the point of recklessness.

Client—You are right. I got that by sticking my head into a lift shaft to see if the lift was coming up, and it was coming down. My curiosity was more than satisfied,—Tit-Bits.

"Do you think kleptomania is catching?"
"No; it's taking."



Autumn Time at Excelsior Springs—This season of the year is really the most delightful time of the year to visit Missouri's charming resort. Just the right temperature for golf, horseback riding and tennis. Doctor, you need a vacation before entering upon your strenuous duties for the winter. You will be surprised to find how invigorating you will feel after a few weeks outing at Excelsior Springs. The best mineral water in the world, and the finest baths. Incidentally you will find splendid meals and pleasant rooms at Snapp's, with good service in the bath rooms. Take our advice and try it.

Treatment of the Paroxysm of Asthma-The attention of our readers is invited to the brief article on "Adrenalin in Medicine" which will be found in the advertising section of the current number of this journal. While, obviously, this space is purchased for advertising purposes by Messrs. Parke, Davis & Company, it has been put to a novel use by the publication therein of a scientific essay of unusual merit in which a vexatious problem is discussed. Whatever intelligence the future has in store on the pathology of asthma, the present state of our knowledge justifies the use of any dependable therapeutic measure for the relief of the acute paroxysm. Morphine is objectionable for reasons that are generally accepted. Per contra, Adrenalin does not narcotize the patient. It affords him almost instant relief, with no disagreeable sequela to mar the effect. To quote from the announcement under consideration, "Adrenalin is the

- Tetanus Antitoxin
- **Diphtheria Antitoxin**
- Acne Vaccine (Mixed)
- Colon Vaccine (Acne)
- Pneumococcus Vaccine
- Pneumo. Antigen (Therapeutic)
- 16 Streptococcus Vaccine
- Strep. Pneumo. Vaccine
- Staph. Vaccine (Mixed)
- Ozena Vaccine (Mixed)
- Pertussis Vaccine
- Pertussis Vaccine (Mixed)
- Urethritis & Cystitis Vaccine
- Respiratory Vaccine
- 33 Influenza-Pneumo. Vacc. (Mixed)
- Typhoid-Paratyphoid Vacc.
- Colon Vaccine (Mixed)

ORDER BY NUMBER

Order By Number

BEEBE VACCINES

Freshly isolated organisms of HIGH ANTIGENIC value are being continually added to Beebe Vaccines, thus giving them the greatest prophylactic power and therapeutic action.

We operate two large Clinical Laboratories and receive daily a great number of strains of various organisms, FRESHLY ISOLATED from ACTUAL CASES. This assures cultures of HIGH ANTIGENIC VALUE.

"Infinite details greatly influence final results."

Beebe Laboratories, Inc. Argyle Bldg., Kansas City, Mo.

best emergency remedy for the treatment of the asthmatic paroxysm at the command of the physician." Two to ten minims of the 1:1000 solution are injected subcutaneously or into a muscle, relief usually following in a few moments. The addition of an equal amount of Pituritrin is said to prolong the effect of the Adrenalin.

Diphtheria Antitoxin-The administration of diphtheria antitoxin has reduced the mortality of diphtheria in twenty-five years nearly 75 per cent. Despite this valuable means of passive immunization, despite control through quarantine and intensive culturing, there has been, during the antitoxin era in the United States only an approximate 30 per cent incidence reduction in the disease. This continued frequency places a large measure of responsibility upon the parents and guardians of our child population, questions the method of public health officials and reproaches the ideals of the medical profession. Bernard Carey writing on "Diphtheria, the Uncontrolled" (Boston Medical and Surgical Journal, July 24, 1919) says that ignorance as to the possibility of a sore throat being diphtheria, and the neglect to call a physician appears to be the largest single factor. If this is the case, then by suitable educational propaganda it must be made as evident to the layman as it is to the medical man that the mortality from diphtheria is almost in direct proportion to the delay in calling the doctor and the administration of sufficient antitoxin. Some of the responsibility lies, too, with health authorities and the doctors themselves. There is no doubt that a few physicians still diagnose diphtheria by the odor or by the presence of a membrane; some who wait for a laboratory diagnosis of

diphtheria before administering antitoxin, some who do not use large enough primary doses; and some do not have the courage of their convictions to inject antitoxin intravenously in severe cases or those seen late in the disease. In 1905, Dr. Williams restated three rules concerning the use of diphtheria antitoxin which he had presented to the Massachusetts Medical Society some years before, and which he felt still held good: (1) Get a good antitoxin, (2) Give it early, (3) Give enough of it. And after fifteen years, they are still the eptitome of efficient antitoxin therapy, with an added (4) Use the intramuscular and intravenous methods in injection. By their strict, or one might well say, their stricter enforcement, a forward step in still further decreasing the incidence and mortality of diphtheria can be brought about. addition to a potent antitoxin, the convenience of the package and the efficiency of the syringe are determining factors in antitoxin choice. The Eli Lilly & Company antitoxin meets the demands of the most discerning physicians. Its antitoxin is consistently dependable, the unitage of its packages enables the physician to select for his case the optimum dose clearly and its method of distribution provides ready service through the retail druggist.

Doctor, if you receive a copy of the Medical Herald and are not a subscriber, please take it as a cordial invitation to remit a dollar and receive our magazine for the year 1921. Turn to advertising page 68 and note the feast of "Good Things to Come" in the early issues of the Medical Herald. Remember, our subscription rate advances to two dollars on Jan. 1, 1921. You may subscribe for as many years as you like, at ONE dollar per—but not after December 31. How many dollars do you wish to save?

NOVOCAIN

(Procaine-Metz)

AND OTHER LOCAL ANESTHETICS ADMITTED TO THE MAILS

Novocain and Novocain Tablets can now be transmitted by mail.

We are prepared to furnish Novocain-Suprarenin (N-S) Tablets "A," "B," "C," "E," "H" and "T," and Novocain Tablets "D" and "F," representing various strengths for various usages, in all conditions in which local anesthesia is indicated, as well as Novocain in powder form.

If unobtainable from your druggist order directly from

H. A. METZ LABORATORIES, Inc.

122 Hudson Street

New York

The Resorption of Syphilitic Deposits—In the resorption of syphilitic deposits Iodia (Battle) will be found of marked satisfaction. The use of extemporaneously prepared mixtures of the iodides very often is attended by unpleasant effects, with the result that in some cases the mixtures must be suspended. Iodia (Battle) is a carefully compounded mixture of pure drugs and with a well balanced formula. This is a point of merit that should not be overlooked in choosing a combination of the iodides. Possessing a distinct therapeutic result, Iodia (Battle) causes a minimum of untoward effect for which reason it may be continued for long periods.

Neurotic Children—In the management of the more obvious neurotic manifestations in children, the average physician hesitates to use chloral or the bromides by reason of their depressing influence, and consequently all too frequently a serious therapeutic effort is not made, to the little patient's detriment. It is in such cases that Pasadyne (Daniel) shows up to a fine advantage. This product, a concentrated tincture of passiflora incarnata, possesses definite sedative properties and yet does not produce the distressing after-effects so often developing after the use of other sedative agents. Its reliability and high potency make Pasadyne (Daniel) an agent of large usefulness. A sample bottle of Pasadyne may be had by addressing the laboratory of John B. Daniel, Inc., Atlanta, Georgia.

PROOF

A quack doctor was advertising some medicine on a street corner.

Doctor—I have sold these pills for twenty-five years and never heard a complaint. What does that prove?"

Voice from the crowd—That dead men tell no tales.—Clinics.





"Good Things to Come"—Be sure to read the list of original articles shortly to appear in this magazine. You will find a widely varied list of interesting topics. See adv. page 68.

For Goitre—Doctor, you should try the special goitre tablets put up by the Columbus Pharmacal Co., Columbus, O. One trial will convince you. See announcement in this issue.

"Poems the Doctor Should Know"—16 pages, 45 poems of war, love and patriotism, including the immortal poem, "In Flanders' Fields," by McCrae, and several answers to its challenge. Price 10 cents a copy, three for 25 cents. The Medical Herald, Ridge Building, Kansas City, Mo.

To Herald Subscribers—Please bear in mind that our subscription rate will be advanced to TWO DOLLARS per year on January 1st. You may subscribe for one to five years at the dollar rate, if you wish, providing you do so before December 31. "A word to the wise," etc. Do it today.

Intravenous Medication—If you wish to give your patients the benefit of the latest, up-to-date treatment for anemia, syphilis, and skin diseases, write for clinical data to the New York Intravenous Laboratories, 110 East 23rd street, New York City. See announcement on page 59, advertising department of this issue.

Two New Abbott Products—It is announced by The Abbott Laboratories that they are now producing in quantities both Acriflavine and Proflavine, the two antiseptics which are meeting with such success in the treatment of gonorrhea. Doctors who are not familiar with these new antiseptics are invited to send for literature to The Abbott Laboratories, Chicago.

B. E. Dawson, A. M., M. D., will hold his annual fall class and clinic in orificial surgery at Grace Hospital, Kansas City, Mo., Nov. 15 to 20, 1920. In this course will be taught the philosophy and technique of orificial surgery, including the latest and best methods of treating rectal diseases. Special emphasis given to office technique. New methods of diagnosis and new therapeutic measures demonstrated. Orificial surgery solves the problem of chronic sufferers, furnishes the key to sexual abnormalities, smooths the road of moral delinquents and offers a helping hand to the insane. Tuition, \$150.00. Certificate of attendance furnished. Write for particulars. B. E. Dawson, M. D., 3110 Charlotte St., Kansas City, Mo.

A Bargain—One factory renewed 5 K. W. x-ray transformer, 220 volt A. C. outfit, complete at exceptional price. Address X, care Medical Herald.

A REAL DOCTOR'S HOPE

We desire to call attention to an announcement in this issue, under this caption, which our readers cannot afford to overlook. We have never recommended, in these columns, any oil propositions, but this one has behind it such a strong company that we have no hesitancy in giving it our personal endorsement. Following is a brief history of the company:

The Danciger Oil and Refining Co., organized in March, 1917, with a capital of \$300,000, operated successfully with short capital until October, 1919. The company was then reorganized and the capital increased to \$5,000,000 shares of a par value of \$1.00 each. A block of the shares were offered to the public and were quickly absorbed. With these funds used in development such enormous profits were made in a short time that the books of the company were closed. At this time the company has outstanding about 1,300,000 shares of a par value of \$1.00 each, which is practically its only liability, with approximate assets based on present values, of \$3,000,000 and sufficient earnings to pay more than double the dividend; of 24% per annum. Has cash and quick assets on hand approximating \$700,000. The affairs of this company are under the management of the five Danciger Brothers, whose reputation as successful oil operators and business men is unquestioned. They have surrounded themselves with a large capable organization of successful oil men, and have upwards of thirty successful completions to their credit this year, without a single failure; the largest well having an initial production of 3,000 barrels daily. The original shareholders having received 100% stock dividend, are now drawing cash dividends of 48% per annum on their original investment, and their holdings could be cashed for 600% profit. Call or write for full particulars. Danciger Oil and Refining Co., Kansas City, Mo., fourth floor Ridge-Arcade.

BACK TO FIRST PRINCIPLES

Every once in a while, when humanity gets scared, it abides by the sensible laws of cleanliness and physical care laid down when the first trees bloomed.—New York News.

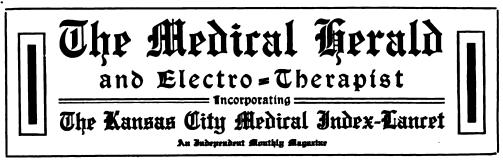
THE LOST KEY

Say not, "I know it, but cannot express
That which I know." * * There was a king
of old

Whose treasure hoards were useless. He had lost
The key that kept the jewels and the gold.

—Youth's Companion.

Anedomin
the sovereign Remedy for DROPSY
Samples to Physicians Only.
ANEDEMIN CHEMICAL CO., Chaffanooga, Tenn.



VOL. XXXIX

NOVEMBER, 1920

No. 11



WHY THE PHYSIOTHERAPIST* BURTON B. GROVER, M. D., Colorado, Springs.

At this time I wish to express my appreciation of the honor conferred upon me in being selected as the first president of this association.

One year ago a few enthusiastic men and women organized this association. It gave promise of becoming not only useful to its members, but a means of disseminating to the profession at large knowledge of the advantages to be derived from physiotherapeutic measures in practice.

Like many organizations of its kind, it has had trials and tribulations, but thru tireless efforts the period of marasmus is now passed and it has reached its second birthday with a most promising future.

This association is composed of men and women in the breasts of whom exists the desire to become better physicians and to put an end to the drifting of the public to irregulars for relief, due principally to the want of recognition by the profession, of the efficacy of super therapeutic measures.

The history of electrotherapy is not unlike that of mankind—born in ignorance, bound down by a belly-band of credulity, nursed on superstition, clothed in gorgeous colors, educated in false doctrines and entered into practice in a spectacular robe under which was concealed a decrepit body of misrepresentation and conceit. Thru the most painstaking scientific investigation the gorgeous robe has been removed, and today electrotherapy stands upon a high plane

of usefulness and is an honored consultant in medical practice.

Pernicious weeds thrive in uncultured fields. Electricity fakirs can thrive only in uncultured neighborhoods. Honest toil will remove the tares from the field, and energy and scientific application will remove the fakir from electrotherapy. We boast of civilization and high scientific attainments, but this is justified only in a degree. Civilization is but a thin veneer covering and savage instinct and which can be easily broken and desquamated. This has been demonstrated by the late world war.

After all, we are nearer scientific domination today than ever before. We no longer look upon the lightning-flash as a demonstration of divine wrath and the neurasthenic as a witch. The knowledge of science is but an understanding of nature. Everything in Nature's factory is produced by unchangeable scientific laws. The better we understand these laws the better we succeed in any undertaking.

While our country is overflowing with schools, colleges and universities, we have almost an equal number of jails, almshouses and asylums. Our hilltops are illuminated with knowledge and the residents thereof are full of scientific attainments, while our valleys are unlighted and the darkness of ignorance still prevails. There is much to be done by those living on the hilltops to remove the clouds below. It is quite probable that physicians as a class reside somewhere near the hilltop, but few of the profession command a position of continuous illumination. Many are traveling a narrow route, thinking they are in the illuminated district, but soon find to their amazement that the sun has gone down and that they are grouping about with a tallow dip. A flash of lightning (electricity) lights the pathway, but they see in it only something to thwart their interests. Mother Nature is speaking in scientific language, but they hear her not. Here and there they read that Doctor Blank has secured wonderful results with nitrite of flapdoodle in cases of high blood pressure. Dr. Blank lives in a professor's house high up in the

^{*}President's address, Western Electrotherapeutic Association, at the annual meeting in Kansas City, Mo., May 27 and 28, 1920.

illuminated district, and, of course, what he says must be scientifically scientific.

For a period of twenty years the wise ones of our profession shook their heads at the statement of Dr. Carlos Finley, that yellow fever infection was carried by a certain type of mosquito, and after twenty years more had been consumed in isolating the germ, it was left to a little dark-skinned gentleman from Japan to come here and point it out to us.

Strange as it may seem, our hardest work is among members of our own profession. The mere announcement of any method of treatment contrary to the teachings of his alma mater sets a physician into a flame of resentment and he is not slow in his denunciation of what he knows little or nothing about. It is universally conceded by physicians themselves that their knowledge of materia medica and therapeutics is far below the standard of thirty years ago. The physician of today is striving for that unattainable goal-perfection in diagnosis. Therapeutic measures are matters of less importance. It is almost proverbial that many of us overlook the fact that a physiological process is one of death and a pathological process one of life. In the observance of nature's unalterable laws everywhere about us we cannot avoid understanding that life is but a process of death. The bud appeared yesterday; today we feast our eyes upon the gorgeous hue of the flower; tomorrow the funeral rites of the flower are observed, followed by seed formation intended to start anew the process of death.

Pain is a reminder of a process going on and demanding our attention. It is a voice calling in loud tones for assistance. Nature is working overtime in a reparative process of the organs which we have so unfortunately impaired. We, as physicians, are supposed to possess sufficient knowledge to enable us to answer the call intelligently and assist nature's efforts. It is a sad commentary on our intelligence when we but stifle her cry by the administration of a narcotic. What we are pleased to call the symptoms of a pathological process are, in fact, the result of nature's effort toward repair. The best physician is he who interprets the language of nature which is nothing more than the science of death. The death of man is nature's fulfillment of a physiological process. The cutting off of this process is but the result of our ignorance of the physiology of death.

There is probably not a subject in medicine so little understood as fever. It was said many years ago by a great thinker, his name I cannot recall, "What a glorious achievement it would be to find a way of producing fever and controlling it as a remedial agent in the treatment of chronic diseases! What wonderful results would crown our efforts!"

It is to be regretted that the medical profession of today has not a better understanding of the physiological efforts of nature toward repair and destruction. It is thru the efforts of such men as d'Arsonval and Tesla that we are now able to raise the temperature of any part of the entire body and control it; and thru our ability to do this we are attaining some of the objects of which scientific men have dreamed.

Hyperemia is called into play by nature probably more often than any other reparative process. Hyperemia is always accompanied by an elevation of temperature. If we, who employ electrical modes in practice, have learned any good and valuable lesson, it is found in the production of hyperemia. If nature is scientific in its application of hyperemia to hasten the reparative process, why should we, who claim to be nature's first assistants, not take the suggestion. In general practice the physician often produces hyperemia of the skin for what he claims a revulsive effect. He never thinks of inducing hyperemia of the internal organs for the purpose of hastening repair. When advised that this can easily be done he first doubts, then rebels, and in vigorous language absolutely denies that hyperemia can be induced at any point within the body desired, a fact known to all electrotherapists and no longer questioned by anyone who has taken pains to become informed.

In recent years there seems to be considerable interest manifested in endocrine function. Notwithstanding the immense amount of investigation along these lines, it has resulted in no definite conclusions as to cause and effect. Like other disturbances of function the symptoms are often due to a general derangement of metabolism arising from toxins and other sources rather than organic changes in the glands themselves, and unless the symptoms clearly indicate such changes, the administration of endocrine products seems to me the essence of empiricism. It is often possible to restore the function of impaired glands by the application of diathermic currents. The restoration of glandular function by this method coincides with nature's efforts. hence a scientific method. In cases where the gland has been removed or is congenitally defective there is nothing that equals endocrine therapy. While the administration of endocrine products may stimulate the gland to increased secretion, it is more likely that they simply supply the demands of the organism for the time being. There is no gland of the body, ductless or otherwise, that may not be reached and its function profoundly influenced by electric en-

This is the age of progress. The physician who works no harder than in his college days is a back number. The progress of medicine has more than kept pace with the advancement

along commercial lines. The advancement in electro-therapy has kept pace with the development of electricity in commerce, but there are today men employing electricity in therapeutics in the same manner as they did twenty years ago. They talk about ascending and descending currents and labile application of galvanism. They employ a cell selector instead of a milliammeter and rheostat. They still believe that the efficiency of a faradic coil depends upon the number of miles of wire in its secondary. They have not yet learned the effects of electricity on metabolism nor its scientific application to produce physiological results. The electrotherapist of today is amazed at the statements made by recent writers on electrotherapy. Those who now employ electrical methods in an empirical manner are not unlike the man who has learned little since he passed the "green room" of his alma mater. The hap-hazzard methods of such are our stumbling-blocks of today. What we desire and must have is a thorough training in electrotherapeutic application in our medical colleges. No attempt should be made to make a specialty of electro-therapy. It goes hand in glove with the practice of medicine. It supplements the technic of the surgeon, assists the internist and becomes the crowning glory of the orthopedist. It accomplishes what no other agency can effect.

It is tempting to confine our work to electrotherapy because we know that through its scientific application better results may be obtained than by any other exclusive branch of medicine; but, while it is of vast importance in the management of disease, it is not all there is in medicine. We need drugs and every other therapeutic agent that has been proved useful in practice. know little enough about disease and its management, and when we have at our command an agent so potent for good as electricity it is criminal not to use it. The physician who sees nothing in electrotherapy except its psychic influence forgets that a great share of his success is due to psychological influence. His very presence with a patient has its psychic influence. The confidence of the patient in his physician will sometimes give a laxative effect to a dough pill. We do not deny the psychic influence of electricity, but to say that all its efficacy lies in such effects is the purest of balderdash. Can any of our critics abort an acute bronchitis in thirty minutes by any therapeutic method known to This can be done by the scientific application of electricity. Is there anything in his armamentarium that will so quickly relieve myalgias and spasm, such as torticollis and lumbago? Does he know how to equalize the circulation in fifteen minutes? Is there anything in his drug equipment that will so quickly and efficiently correct defective metabolism, drain en-

gorged tissue, relieve muscular spasm, restore to normal atrophic conditions, resolve strictures, remove neoplasms, effectually reduce hypertension, increase arterial tension, induce hyperemia, relieve congestion, dissipate adhesions, unload an engorged liver, feed the myocardium, relieve hyperthyroidism and at least equal surgery in exopthalmic goitre, restore diseased tonsils, remove papillomas from the bladder, relieve the pains of locomotor ataxia, abort a pneumonia and arrest pulmonary tuberculosis? There are many other insidious processes that can be corrected by electrotherapeutic methods in a more satisfactory manner than by any other method. Then is it not worth while for medical colleges to teach this important method of therapy? There is a crying need for information upon physical measures in therapeutics.

At this point in the writing of this address I received a circular letter from a firm selling electrotherapeutic apparatus and from which I will quote: "You get with it" (meaning machine) "a treatment book which teaches you to use it successfully in an hour." Electrotherapy learned in one hour! In such statements as this lies at the present time the danger to the public and to the reputation of the medical profession. Too much depends upon the scientific application of electrotherapeutic measures to be intrusted to incompetent hands, and to such statements as just q uoted is due much of the criticism from the medical profession. The mercenary methods of some manufacturers of electrotherapeutic apparatus have done more to discredit their use than all the quacks in christendom.

The military hospitals in the late war were fairly well equipped with electrotherapeutic and other physical measures, and thousands of cases were treated and restored to the service. Thousands more might have been restored if the army could have secured the services of men competent to administer these treatments. The main reason for not attaining a greater success was the want of competent understanding of the subject by army officers. It will ever be regretted that there were so few men who had received adequate training in physical measures at a time when so much could have been done for the relief of the injured of the late war.

So many fakes have been sprung on the medical profession that it is not surprising that it is cautious in the adoption of any new plan of treatment. The big and fairminded men of the profession as a rule are willing to listen and weigh the evidence offered and are mild in their criticisms. Constructive criticism is good for all of us, but fretful faultfinding harrows the soul. It is the little man in medicine who stands on the pedestal of prejudice and always refers to his pure ethical methods.

Some physicians object to the use of electricity in medicine because it is employed by quacks. Should we object to the use of a truss because it is used by quacks, or to the use of opium because Mrs. Winslow put it in her Soothing Syrup?

There can be no violation of medical ethics in the employment of physical measures when done in a scientific manner.

When one enters the medical profession the object of which is service to humanity, an obligation is assumed to conduct himself in accordance with its ideals.

A physician may violate the code of medical ethics in the use of a speculum as well as in the use of an electrical modality.

It is not the means but the man who is responsible in ethical procedure.

I am a fellow of the American Medical Association, and I am proud to belong to this society which is composed of the leading thoughts of the world, but I am sorry to note that it has in its membership so large a sprinkling of codfish aristocracy. It is humiliating that so many men in the medical profession will not give a respectful hearing to any method or procedure of treating disease unless it bear a brand of what they are pleased to call "a regularly recognized source." Zeal for ethical procedure closes their source." eyes to fair play. Some writer has defined a crank as a person who sees one truth so vividly that he is blinded to all other truths equally important. In accordance with this definition of the word crank, may I ask who are the cranks in the medical profession?

Any system of religion, politics or medicine produces arrogance, selfishness and tactics of rule or ruin. We have had a recent demonstration of this policy of trying to rule the world. It was the mugwump who disinfected the republican party. It was the freethinker who modified the Christian religion. It was the fairminded investigator who dared to challenge orthodox medicine and he will, in time, make it a real democratic organization.

Who were the forefathers of so-called regular medicine? I have been in practice long enough to have had the pleasure of meeting a few of them personally. They were men who were pompous in appearance, full of bigotry and positive in diagnosis and therapeutics. Their practice was one of routine. It all may be summed up in the little poem by John C. Letsom:

"When people's ill, they come to I,
I physics, bleeds and sweats 'em;
Sometimes they live, sometimes they die.
What's that to I? I lets 'em.

For many centuries medicine was an individual art. It may be said that it was an individual product. Its success depended much upon

the individual genius of him who practiced it. The individual theorized, had notions and fancies to which was added the experience gained which made up the practice of medicine. It was a combination of imagination and skill. Rational or regular medicine grew up under the teachings of men who were strong-minded, bombastic and dogmatic, yet who were students of human nature. They knew when and where to dispense sympathy and encouragement as well as when and where to upbraid, castigate and perhaps swear. The control of medicinal practice was in the hands of such men for centuries. It was not until the last forty years that medicine has had any claim whatsoever to the word rational. Medicine will not become rational and regular until the walls of dogmatism and prejudice, which now confine the eternal truths are torn asunder. Reason and demonstration are gradually supplanting assumption and mystery. These are the days when we stop to inquire into the reason for things, but superstition dies exceedingly hard.

The benefits derived from electrical treatments of the wounded in the late war have increased the interest of the public and profession alike, in their great value and possibilities.

There are about 80,000 people disabled annually in the U. S. This opens up a great field for all of us who are able to make the correct application of the different modes of physiotherapy to those disabled in the various industrial occupations. Let us correlate our forces with the surgeon, internist and orthopedist and prove our worth in this great work.

The rehearsal of statistics is ordinarily considered very dry, but I wish to call your attention to those of the Special Hospital at Ramsgate, England (a Canadian hospital), which I believe will be of interest. The records of this hospital show that in 14 months November, 1915 to December, 1916, inclusive, 4399 patients were admitted, of whom 1795 were discharged to full duty, fit to take their place in the front line; 633 to light duty; 772 invalided to Canada for discharge and 400 trasferred to other hospitals for other treatment. Two thousand five hundred and fifty-eight were returned to active military work and taken off the pension list. These were all men who had been in ordinary hospitals from 3 to 15 months and who without this special treatment would have invariably become a public charge. It is the history of all military hospitals that the return of men to the service was 30 per cent greater from hospitals where physical methods were employed. Is not this record sufficient to prove the inestimable value of physical measures in medical practice? The results obtained are marvelous when we know how these institutions were handicapped for want of efficient apparatus and thoroughly trained men to

operate even what they did have. The men who had under their supervision these measures of treatment were as a rule prejudiced against their use and many cases were indifferently and insufficiently treated. If almost immediate improvement was not forthcoming the patient was transferred for some other method of treatment.

The following description of the currents used in the hospital at Ramsgate is quoted from an article in the American Journal of Electrotherapeutics and Radiology of October, 1919, by the late Lt. Col. Robert Wilson of Toronto, Canada: "The greatest difficulty was experienced in obtaining suitable electrical apparatus sufficiently rugged for the continuous work demanded of it, and eventually we had to have constructed an apparatus for giving galvanic, faradic and sinsuoidal currents in the various forms. The socalled 'earth-free' type of machine was adopted, where the main current is used to drive a small motor which in turn drives a directly connected continuous current dynamo of approximately one ampere capacity. In this way even the inadvertent giving of the total capacity of the machine, not more than 1000 M. A. could possibly be given and the consequent danger to life which would follow the short circuiting of a wall plate type of machine, with the possibility of the patient getting the full voltage and many thousand milliamperes of current avoided. It is worth noting at this point that the method used for interrupting the galvanic current for the stimulation of paralyzed muscle differed from that in general use. The clockwound metronome with its sudden impulse of current was discarded, and an electrical motor-operated interrupter with controls sliding on a resistance coil, was substituted. By an arrangement of wiring in binding posts it was found possible to give an interruption of the current of almost perfect sine wave form in which either the positive or negative pole alone be used or both in combination. It was also possible by means of a switch to pass the faradic current alone, the sinusoidal alone or any combination of them through this interrupter, the effect being to substitute a gradually increasing and decreasing intensity of current and a consequent evenness in gradation of contraction for the sudden jump obtained by the use of the metronome."

Electrical water baths equipped with a sinusoidal current, electric light cabinets for radiant heat, needle shower and spinal douche baths, as well as the Russian steam bath were used. High frequency machines were used for thermo-penetration. I gather from the Colonel's paper that practically all physical treatments were administered by nurses. Of the men he says, "Very few entered into the work with any degree of enthusiasm."

It seems to have been the custom in many of the military hospitals to employ the water rheostat which was constructed with two sticks of carbon, two bars of wood and a casserole filled with water. At each end of a bar of wood laid across the casserole was attached a stick of carbon, each stick of carbon dipping into the water being connected to the wire carrying a galvanic current. It is claimed that this form of resistance allows a 25 per cent increase of current to reach the patient and heavy currents may be administered for a long time and within the toleration of the patient. This is a modification of the old time water rheostat which consisted of a vessel of water into which were dipped two wedge-shaped pieces of carbon, the carbons being connected with the positive and negative ends of the galvanic current and the current being controlled by the amount of surface of the carbons touching the water, the less the contact of carbons with the water the greater the resistance.

Little, if anything, that may be said to be new has been added to the literature of high frequency currents during the past year. Victor Electric Corporation has a new high frequency apparatus called the Model "Wantz. It furnishes the Telsa and Oudin currents. The manufacturers claim to have produced an apparatus capable of furnishing a d'Arsonval current, but so far as I am able to judge by the description of its construction, the current described as d'Arsonval is in reality on Oudin current. An important part of its composition is the spark gap which is well designed, noiseless in operation, self cooling and capable of almost continuous use. The condensers are made of glass and liable to puncture and may have to be replaced. It is to be regretted that no manufacturer of high frequency apparatus has, up to the present time, placed on the market a machine which furnishes a true d'Arsonval current.

During the past year a new high frequency electrode has been perfected by the Victor Electric Corporation and is offered to the profession under the name of Victor Non Vacuum Electrode. It is made of glass and, according to the manufacturers is unbreakable with ordinary usage. The danger of breaking when employed in any of the cavities of the body is reduced to the minimum. It can be used where any metal or rubber electrode is employed. It is claimed that the heat produced by this electrode is radiant, thus insuring a greater thermal penetration. It is also claimed that the oscillations of the current are increased by the use of this electrode. It has an internal coating of pure silver giving to it an elegant appearance. It is manufactured in all standard forms and made to fit any style of handle now in use, and will be made in any form desired by the purchaser who will furnish the specifications.

Men who have learned the value of electricity in medicine have no desire to organize schools for its propaganda. There are too many isms in medicine today, and there should be but one great broad school in medicine. There is no ism practiced today but what has some merit. There is no Utopia in medicine. Why should we not have schools of rational therapeutics based on sound scientific investigation, careful observation, critical selection and broad enough to incorporate the essential and useful of all forms of healing. The old prejudices are with us, but our minds must be freed from passion and bias and we must seek the truth and not be afraid to teach it.

Let me urge you to write papers upon the use of physical measures in therapeutics, and read them before the societies of which you are members, that the interest already aroused by their use in the late war may be sustained. Let us have a sifting committee broad enough to choose from the various methods all that which is worth while and make up a real medical science. We are human and have the same hopes and desires; we differ only in our methods. Some of our minds stop working after making what we are pleased to call a diagnosis. The patient is not so much interested in our skill as a diagnostician as in our ability to make him comfortable; his mind is not so settled on the means as on the results.

We should understand that those practicing isms in medicine may seure results regardless of scientific theories. They may know absolutely nothing about the etiology and pathology of disease and yet secure results satisfactory to the patient. I would like to see the day when all labels on those practicing medicine be removed and the word physician stand for all the good there is in therapeutics.

This association is an expression of our desire for better application of methods by which practical effects may be given the principles for which we stand. It is our intention by every means in our power to insure its practical efficiency. It is our firm belief that through its instrumentality we can hope to become better physicians. The work of this association has now assumed definite character and will have that particular force which should be associated with our work.

It is an established principle in social economy that knowledge in the individual and its rapid spread to the multitude are alike beneficial to individual and state. Therefore it becomes a moral obligation to be intelligent. If we are to come up to the standard of what is expected of us we must be on the alert to grasp

every opportunity which presents itself for our advancement.

It is the desire of the organizers of this society that it shall be one of high standing and scientific value to that end it must have no substandard requirements.

EXAMINATION OF THE FECES

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The diagnostic value of clinical analysis of
the feces is not generally appreciated. In its
passage through the digestive canal food is reduced by various chemical and bacterial transformations until it is ultimately reduced to waste
products destined to be eliminated from the body
as useless or injurious. These final metabolic
products together with other products of oxidation are or should be expelled from the body as
fast as they are formed. The fecal mass varies
widely in different individuals according to the
character of the food and the habit of going to
stool.

Composition of the Feces: Feces are derived from several sources namely:

- 1. The unchanged residue of animal or vegetable tissue used as food; such as hairs, horny and elastic tissues, most of the cellulose, woody fiber, spiral vessels of vegetable cells and gum. Proteins are never found in the feces with a moderate diet.
- 2. Portions of digestible substances, especially when these have been taken in too large amount or when they have not been sufficiently broken up by chewing, portions of muscular fibers, ham, tendon, cartilage, particles of fat, coagulated albumen, vegetable cells from potatoes and other vegetables, raw starch, etc. All foods yield a certain amount of residue, as, for example, white bread, 3.7; rice, 4.1; flesh, 4.7; potatoes, 9.4; cabbage, 14.9; yellow turnip, 20.7 per cent. Some fat is nearly always present in the feces in the form of fatty acids, and to a small extent as calcium or magnesium soaps. The amount of fat found depends upon the amount of fat ingested and upon the amount of bile secreted.
- 3. Products of intestinal secretion, namely: cholestrin probably derived from bile, urobilin or stercobilin derived from the bilirubin (pigments) of the bile and other decomposed products of bile pigments which do not now yield the Gmelin reaction (nitric acid test), as well as the altered bile acids. The reaction, however, may be obtained in pathological stools, biliverdin, glycoholic and taurocholic acids occur in meconium.
- 4. After a milk diet and also after a fatty diet, crystalline needles of calcium combined with fatty acids, chalk and soaps constantly oc-

cur, even in the sucklings, and even unchanged masses of casein and fat occur during a milk cure.

- 5. Among the inorganic residue, soluble salts rarely occur in the feces, because they diffuse readily, among these being common salt and other alkali chlorides the compounds of phosphoric acid and some of those of sulphuric acid. The insoluble compounds—of which ammonia comagnesic or triple phosphate, neutral calcic phosphate, yellow-colored lime salts, calcium carbonate and magnesium phosphate are the chief forms. Some of these insoluble substances are derived from the food, such as lime from bones, and, in part, they are excreted after the food has been digested.
- 6. Products of bacterial action. These comprise the entire series of fatty acids, from acetic acid to palmitic acid, further, lactic acid succinic acid, glutaric acid, leucin, tyrosin, hydroparacimaric acid, para-exyphenylactic acid, phenyl-propionic acid, phenylacetic acid, phenol, paracusol, indollskatol, skatol-carbonic acid, ammonium carbonate, ammonium sulphide and conjugate glucuronates. These bodies impart the disagreeable fecal odor to the mass.
- 7. Micro-organisms in great quantities are present and often make up a considerable portion of the total fecal solids. The bacillus coli communis predominating. Also parasites and their ova.
- 8. Mucus, detritis and epithelial cells. These cylindrical cells of the mucous membrane are sometimes almost intact. Blood, pus, gall stones, etc., are sometimes found.
- 9. Purin bases—guanin and adenin—which come directly from the food and also from the metabolism of the tissues. These are increased on a diet, rich in purins (meat extracts and thymus) but are also found on a milk diet.
- 10. Water. The consistency of the feces varies with the water content, which fluctuates between 68 and 82 per cent. It depends less on the water drank than on the vigor of intestinal peristalsis, the tone of the intestinal vessels and the state of the intestinal epithelium.

Gases—Gases developed within the digestive canal together with the air swallowed with the food and saliva are important factors in the process of formation of the feces. These gases result from fermentation and putrefactive activities of the bacteria within the intestine. As this development of gases is due to decomposition of the food stuffs, it follows that quantity and kind of gaseous mixture varies with the nature of the diet.

Oxygen of the swallowed air is rapidly absorbed by the blood through the mucous membrane of the stomach and is absent from the intestinal canal. Carbonic acid from the blood is

also given up into the air of the stomach and partially mixes with the duodenal gases. Ruge analyzed the intestinal gases of man, as given off per anum as follows:

Gas	Milk Diet	Flesh Diet	Vegetable Diet
	16.8	13.6	34
C. H. 4	0.9	37.4	44.5
H. 2	43.3	3	2.3
N. 2	38.3	45.9	19.1

Carbonic acid occurs in large quantities especially after a vegetable diet by

- (a) Cleavage of carbonates, lactates, acetates and citrates;
- (b) Alcoholic fermentation of glucose;
- (c) Butyric fermentation of lactic acid:
- (d) Diffusion from the capillaries of the mucous membrane of the intestines.

The hydrogen so abundant on a milk diet is due to butyric fermentation of lactic acid. Methane which is developed after a diet of meat and vegetables originates in the decomposition of acetates and lactates and of cellulose. Nitrogen is always present though it varies much in quantity with different diets.

Quantity of Feces—There is a wide variation in the daily quantity of feces eliminated, depending on the amount and kind of food ingested. Numerous attempts have been made to find the average composition of feces from a diet containing just enough protein, fat and carbohydrates to keep the body in normal condition. Subjects should be placed upon this test for at least forty-eight hours before a specimen is taken. The following is the diet of Schmidt:

Breakfast-

Half a liter of milk and 50 grams of crackers.

Lunch—(mid-forenoon)

Half a liter of oatmeal gruel consisting of 40 grams of oatmeal, 10 grams of butter, 200 grams of milk, 300 grams of water and one egg, which is to be strained.

Dinner-

125 grams of chopped meat lightly cooked, 20 grams of butter, 250 grams mashed potatoes, containing 10 grams of butter and 100 grams of milk.

Lunch—(mid-afternoon)

Same as breakfast.

Supper—

Same as mid-forenoon lunch.

Even during an absolute fast a considerable amount of fecal matter is formed in man (Fr. Muller-Zeitschrift T. Biol. XX., 1884). Human feces in fasting are yellowish brown balls of medium consistency, with little odor, and resemble the feces of a flesh diet. Upon a flesh diet the feces are small in amount (140 grams) and dark in color, while upon an exclusively vegetable diet they are largest amounting to

500 grams. On a mixed diet the feces of 24 hours weigh about 170 to 200 grams.

Vegetable foods are much richer in substances indigestible or difficult of digestion, so that larger quantities are taken to satisfy the needs of man and a larger residue is left in the intestine. An excess of diet alters the amount of feces. A superabundant meal although it consists wholly of digestible substances leaves more excreta because part of the meal escapes the action of the digestive enzymes and fails to come in contact with the absorbing surface of the intestine. On a mixed diet 1-7 to 1-8 of the ingested food is normally excreted.

Piansnitz (Zeitschift, Biol. XXXV. 1897) concludes that human feces with a few exceptions consist chiefly of excretory products of the intestine and not of the alimentary residues. The quantity of feces depends principally on the nature of the food, some kinds requiring more succus entericus for their digestion than others. It seems more accurate to differentiate foods into those which cause the production of much or little feces than to speak of foods which can be more or less assimilated. Stieh (1853) was the first to note that fecal matters contain substances which have a toxic action on the living body. The unquestionable therapeutic value of purgative waters is due to their exciting the excretory function of the intestine.

Consistency and Form of Feces—The normal pasty or doughlike character of the human stools molded to the shape of the bowel as long sausage shaped segments or as a series of boluses closely massed together is dependent upon the amount of water present. A semi fluid stool may be normal if the diet is largely vegetables. Very liquid stools produced by laxatives are of course abnormal. Such diarrheal movements often stratify themselves, liquid constituents above and solid food below, but often the upper layer is only urine. Very hard stool (scybolar) indicates an abnormally long residue in the colon and excessive absorption of it including water, until the mass is evacuated as small balls like sheep dung, due to tightly packed fecal matter becoming friable. A large quantity of feces may stagnate in the rectum and distend it enormously. The lead pencil or pellet formed stool popularly supposed to be due to rectal stricture really indicates a spastic condition of the colon or a tight sphincter. Stricture of the bowel unless situated in the anal canal may be accompanied by a normal stool.

Frequency of Movements—Even among healthy individuals there is considerable variation in the frequency of bowel evacuations. Some people have several bowel movements each day and others apparently just as well and comfortable have but one movement in two or three days.

there is no sharp distinction between what may be considered physiological and that which is pathological. The less frequent the evacuation the larger amount eliminated at one sitting. Persons whose bowels move but once in several days will eliminate increditable amounts at a time, a half peck has been commonly recorded.

Constipation refers to infrequent movements which are not in proportion to the amount of food taken and in which the bolus is eliminated with difficulty. Constipation is associated with various chronic digestive disturbances, i. e., gastric dilatation, intestinal obstruction, and is also an independent disease due to one or more of several conditions.

Diarrhea—In diarrhea due to disease of the lower bowel the individual movements are not large but very frequent owing to the continuous reflex tenesmus.

Odor of the Feces — The odor of human feces is largely due to indol and skatol, but made more disagreeable by methyl mercaptan hydrogen sulphide and methane.

Reaction of the Feces—The feces are normally acid in reaction as a result of the acid fermentations of the lactic acid bacteria which decompose the carbyhydrate foods, hence, the acidity is greatest on a diet rich in starchy and saccharine substances. A neutral reaction of the feces may occur on a diet rich in proteins due to the development of ammonia or the abundant secretion of mucus.

Color of Feces—The color of the feces varies considerable according to the nature of the food partaken. Contrary to the general opinion, the bile pigments have little influence on the normal color of the dejecta. Infants stools are normally light yellow because they contain unaltered bilirubin. In adult life the feces vary in color somewhat according to the nature of the food but on a normal mixed diet is of a light brown or dark brown color. On a milk diet the stools are light color. On a diet rich in fat they are yellow or clay colored. On an exclusive flesh diet, owing to the presence of hematin and ferrous sulphide, the feces are blackish due to the action of sulphuretted hydrogen, which is always present in the bowel, on the organic compounds of iron contained in the food or in the secretions of the alimentary canal. The feces may be given a blood red color by raspberries, blueberries. blackberries and black cherries, or even an abundance of red wine. Food rich in chlorophyll (green vegetables) produce a green or olive colored feces.

Drugs may affect the color of the feces. Calomel produces a greenish tinge, owing to its antiseptic action which prevents the breaking of the bile pigment into urobilin and also by the sublimate derived from the calomel which changes the bilirubin into biliverdin. Bismuth

and iron produce a tarry stool which can be differentiated from the bloody (hematin) stool only by a chemical analysis. Methylene blue given internally renders the feces blue when evacuated but within a few minutes they change to a bluish green.

Macroscopic Examination of the Feces-Many constituents may be observed macroscopically in the feces such as undigested particles of food, skins or berries, large pieces of connective tissue, woody vegetables fiber, undigested pieces of apples, pears, potatoes, grains of corn, flakes of casein tomatoes. Gall stones, as enteroliths may be found following an attack of biliary colic or even without this association. They are important as an aid to diagnosis and should be carefully sought for by mixing the feces with water and then carefully washing it through a sieve. These examinations must carefully be continued during at least fourteen days after cessation of an attack of colic or the stones may readily be overlooked because they are frequently soft and clay colored. Real gall stones are not to be confused with pseudo-gall stones, woody bits of plants, apple and pear seeds. Concretions of fat or fatty soaps are frequently found after olive oil has been administered for cholelithiasis. Fecal concretions (intestinal stones) incrustations of food particles with organic salts play an important part in appendicitis but are rarely found in the feces. Various animal parasites Protozoa, Vermes, and Insects may be found in the feces.

Mucus (mucin) which normally coats the formed feces may be so greatly increased as to be a large part of the stool. In mucous colitis evacuations may consist almost wholly of the mucus which is whitish, ribbon like or tube like and expelled with violent colicy pains. These long strands may be mistaken for tape worms.

Visible Blood and Pus in the Stools-Occult blood may at times occur in the feces or it may be recognized macroscopically. In these latter instances the origin of the blood attracts our attention. Solid feces streaked or coated with fresh blood indicates a hemorrhage from the pelvic bowel (hemorrhoids, fissure or ulcer) while solid feces tinged throughout with blood would suggest hemorrhage high in the intestine or in the stomach. In liquid stools the higher the hemorrhage the more altered is the blood when voided because of decomposition and digestion. Hemorrhage from the stomach is black or tar like when appearing in the stool. Typhoid hemorrhage may be distinctly red as it is so promptly voided by a stool. Bloody serous liquid stool without real feces present make us think of intussusception.

If any considerable amount of pus is seen it is due to a perforating abscess, small amounts of pus may be due to an ulcer or to catarrhal changes. Undigested lumps of casein may be mistaken for pus in a diarrheal stool.

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PERSONAL OBSERVATIONS REGARDING EYE, EAR, NOSE AND THROAT PRACTICE*

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I trust I may be pardoned for not preparing a paper on a subject of especial medico-surgical and scientific interest, and one dealing with the progress and advances noticeable in eye, ear, nose and throat practice, but I feel that in digressing occasionally to consider some other phases of our daily work, we may discover that we are not nearly so close to the goal of perfection as our egotism and conceit had led us to believe.

We may with propriety, I trust, discuss the degree of preparedness essential to the conduct of a successful practice. In the oldest of all the special branches of medicine, its deserved plane of usefulness and dignity is too often obscured by the activities of those who attempt to treat in their practice every ill human flesh is heir to. Then, too, we see everywhere the imposition of the "six weeks specialist" on the innocent public, which condition can be eliminated only through standardization and a recognized systematic course of preparation necessary for entrance on the practice of this specialty.

It is significant that the calendar of fame and achievement in medical history records only the names of those physicians who recognized that every branch of medicine and surgery could not be mastered by any individual, devoting their time and attention to the branch for which their talents and aptitudes made them seem best suited, and their work and research has usually proven a benefaction to the profession and public alike.

I do not contend that all physicians can be specialists, but I do claim that most of them can be associated with specialists in a way that they will have nothing to lose but much to gain.

Some physicians are not careful where their patients go for treatment so long as it is not their line of work. I know physicians who carelessly refer their patients to so-called "opticians" and "optometrists" for glasses when they know that there is accessible to everyone, educated oculists equipped with instruments of precision, ready to do this work in a scientific and ethical manner, whereas, opticians and optometrists know absolutely nothing concerning the pathology or histology of the eyes, and the majority know very little about the rules of refraction.

^{*}Read before the Tri-State Medical Society of Arkansas, Louisiana and Texas.

It could not be considered as great a mistake for me to refer patients to advertising G. U. specialists or other physicians who have graduated from regular medical colleges and have licenses from state boards, but who advertises to treat certain maladies, as for physicians to refer their patients needing glasses and other eye treatment to opticians and optometrists when they know them to be incompetent to do scientific work.

It should be unlawful for any one not a trained ophthalmologist to undertake the correction of errors of refraction. Certainly, opticians should never prescribe lenses which did not give the patient normal vision with each eye and they should not attempt to fit children under any circumstances. Even this rule would not enable them to avoid mistakes for there are many cases of incipient cataract, glaucoma and other serious conditions in which normal vision is possible to say nothing of myopia and myopic-astigmatism. The public should be apprised of the harm done by opticians and optometrists in attempting something for which they have had practically no preparation.

Now every word I have said you know to be true, but the public does not know it. Obviously the remedy is to educate the people and this can be done by providing for more pamphlets and more public lectures and let each of us do more as individuals and keep everlastingly at it.

Especially great is the need for educating the public on the care of children's eyes. Many children have good vision with one eye and very poor vision with the other. In every such case glasses should be worn to fit the defective eye, or it will rapidly become more and more useless. While the good eye does duty for both, presently the child will stop using the defective eye altogether and will become cross-eyed. It is a serious mistake to suppose that a child will outgrow defective eyesight. If it is not attended to it will grow worse as the child grows older.

The child comes home day after day complaining of his eyes aching and hurting, and probably a headache every night just over the eyes, or at the back of the head. He is dull at school and finds the lessons an intolerable and weary drag. Before he is accused of being lazy, or stupid in his work, his eyes should be examined for refractory errors. No mother likes to admit that her child, especially a very young child, can have anything of the kind; yet one child in every five in this country has defective vision. Often, indeed this defect amounts simply to a blurring or indistinctness of vision when the child is tired, but often it is an absolute inability to get a clear sight at a certain distance with both eyes.

As long as the child was doing no close work these errors remained unexpected, but as soon as

the work of the school begins, Nature either refuses to furnish good vision at all, or she does it at the expense of severe aches and pains, and eye strain occurs. This is the trouble with our school child. The increasing use of the eyes in advancing grades brings out the defect which before was concealed, and it calls on you for remedy, by carefully measuring the refractive error and ordering glasses which will remedy it.

We know with what horror some mothers regard the putting of glasses upon a child, as though it were some form of disgrace. How absurd for any person of intelligence to so regard it. If a child should have a limb shorter than the other, what would the parent do? Allow him to limp around, distorting his spine and injuring his health? Certainly not. She would have the shoemaker make a shoe with a high sole and heel which would correct the defect. She should be told that is precisely the object of the glasses. Of all persons who need glasses, school children with defective vision need them most, because of the continuous and close character of the work they are required to do.

It is a fact that the laws are so lax that they permit uneducated persons to buy a trial case and assume the title of doctor, and attempt to correct errors of refraction, and experiment with human eves.

Too much cannot be said against the pernicious habit of opticians ordering glasses which are as much a medicine for the diseased and complaining eyes as digitalis is for a diseased heart. The pharmacist is far better prepared to administer digitalis, though also unprepared to do so.

The choice of glasses is a delicate operation. He alone is successful in it, who to a perfect theoretic acquaintaince with the subject adds intelligent observation of each patient. It does not suffice to know the action of the lenses and the workings of the visual organs. The state of accommodation and refraction and that of the muscle of the patient's eyes must be considered as well as the particular purpose of his wearing glasses, the peculiar habits and constitutional state of the patient.

The American Board of Ophthalmic Examiners was organized because of the obvious need of some systematized and standardized training for those who are to practice ophthalmology. We should encourage as many as possible, to take these examinations. Short cuts to ophthalmic practice, or to ear, nose, eye or throat practice makes inefficient pseudo specialists, which indirectly affects adversely the finished man in this line. I know one so-called specialist so inadequately prepared for his work that he calls in general practitioners to do all his operating and has an unethical and unholy arrangement with a faking optician, whereby the optician refers every one possible to him after

telling that the said oculist is the best in the southwest, and the oculist in question refers cases for refraction to the optician claiming he is the best in the southwest. This all comes about because of the lack of sufficient education which makes men resort to unethical practices to gain a livelihood.

Physicians through continuous and concerted effort should agree upon some plan whereby each individual needing treatment for any diseases whatever could obtain it without going to a great number of physicians, each of whom is the active competitor of the other. There is a most urgent need of team work to correct present unsatisfactory conditions, and I believe the time has arrived when each physician must claim to be proficient in some particular branch of medicine. Certainly physicians can no longer make the public believe that they are competent to treat any and all diseases, and operate for any and all conditions.

The surest sign that the public won't believe that any one doctor can do this, is the multitude that go each year to the Mayo clinic or to the Battle Creek Sanitarium or to similar institutions, where a corps of experts are working together, each skilled in their respective specialties and each one cooperating with the other.

The position taken by some of the better prepared physician that they have no criticism of any man for the way he conducts his practice, is wrong. Dr. Burleson says, "We, as a profession, have a right to adopt a standard, both of ethics and proficiency, to entitle a physician to membership among us this is necessary if we are to maintain our standing in organized medicine."

There lies before us a period of reconstruction and reorganization in methods of health administration, this readjustment will devote itself largely to the prevention of human ailments, and to the establishment of standards for physicians to measure up to that they may be 100 per cent efficient.

In fighting disease some may advocate a partnership federal and state control of all physicians by putting them on a salary and directing all of their work.

This will never happen because it would be impregnated with politics, and would destroy ambition in some to reach for greater honors. It would be a radical socialistic measure and not take into account the "personal equation," which leads to the cause why some fail and some succeed.

A problem of momentous proportions confronts practitioners of medicine everywhere, because the time has come when the coming together of physicians for organized practice is essential to the successful management and treatment of patients, and because it will afford the

patient better service for less money and at the same time be more profitable for each physician entering into such a mutual medical organization.

Many medico-sociological problems would be solved in part by "group practice" because systematized medical practice would result in the patient getting better examinations, quicker cures at less expense.

The schemes and questionable acts that some men resort to that they may gain patronage and increase their income, is due more to the present competitive system or medical practice than to any inherent or acquired desire to be dishonest.

The code of ethics as formulated by the American Medical Association is not practiced or observed by quite a number of physicians, who enjoy the confidence and respect of the public in general. I might relate dozens of special instances, but, it would serve no good purpose. I only mentioned this that your attention may be invited to the irregularities that exist because of the keen competition in medical practice.

The true physician is always ready to defend the honor and standing of his profession, but he is also untiring within its walls in strengthening its weak places and correcting its evils.

If our rivals are of high character and ability it is greatly to our credit to be successful among them. I, as well as you, desire that we act in accordance with the principles of medical ethics, and I maintain that the eye, ear, nose and throat men of the country must establish a standard and live up to it.

The time is not far distant when a man with his first seven years of technical training will be required to take an additional three years of special training in a well equipped and well regulated hospital before he poses as a specialist.

The establishment of a degree that will indicate to the layman proficiency in otolaryngology, ophtholmology and rhinology is a question that needs much investigation and thought.

The degree of Ph. D. is the highest earned degree. Three years of work is required for it. This is not too much work for those who wish to excel in otolaryngology and ophthalmology. Our desire is not to make more otolaryngologist and ophthalmology but better otolaryngologists and ophthalmologists.

This first degree gives the individual not only professional but scholarly standing. The length of time required to secure this degree should not be urged against requiring it, as after the individual has received his M. D. he can make his own way. Naturally, a prerequisite is an academic degree. Not all well prepared candidates for the Ph. D degree will receive it; hence it seems advisable to grant a second degree signifying expertness in the art of otolaryng-

ology and ophthalmology without indicating research ability.

Any legalized practitioner of medicine has a right to practice any specialty he desires, but he does not have a right to pose as an authority merely because he chooses to limit his work.

What is necessary, is that he develop a special skill in his own line and attain such a degree of excellence of judgment that the general practitioner will refer cases to him because he is an authority. However, there should be some way of determining whether the specialist is in fact what he claims to be. At the present time it is a common thing for physicians just out of college and totally without experience in general practice, to enter the specialties, and undoubtedly here there is a need for a standard.

The medical profession must realize that we are no longer dealing with impracticable ideals that we may discuss academically, shrug our shoulders over, and continue to ignore. The medical profession is becoming more and more responsive to the demands of the public, and the public is becoming more and more enlightened in regard to its relation to the profession.

It is therefore, our duty to put our house in order. We should, each one of us, put into our work these requisites of improved medicine which are within the reach of every conscientious practitioner. This higher standard of medicine which is inevitable is bound to distribute the rewards of our profession more evenly. The days of the spectacular star performances are coming to an end, and in their place is coming the organization where team work will reward honest effort in the individual or in the institution.

Is it right that the physician who has a close view of the living and thinking of the people should play so small a part in their lives. Are we doing all we can to bring about health and sanity which are basic at all times to the national welfare? Workmen's compensation laws and groups insurance schemes are being promoted without seeking the guidance of those best fitted to inspire and direct such undertakings. As a consequence of neglect to take cognizance of these things on the part of the leaders of the medical profession, we have the general practitioner tinkering with industrial injuries with the result that disability is prolonged and there is a greater loss of time and wages to the workman, and a loss of money to the employer, with consequent decreased production, and to society a greater burden. In President Wilson's industrial conference the medical and surgical profession had no representatives. If the profession does not awaken from its social, or rather unsocial torpor, legislation will be passed to suit labor or capital, but it will have no consideration for the interest of the profession.

Do those facts suggest why we have been unsuccessful in our demand for a federal department of health? The properly trained physician and surgeon should be taken out of his office where his services reach mainly only the rich or, through dispensaries, hospitals and clinics the poor, and placed in groups diagnostic clinics where his services will be at the disposal of the laborer. Our usefulness in the discussion of social problems has not thus far been noteworthy. During the last decade there has developed, in response to the demand of industry, the industrial physician who is desperately trying to cope with industrial problems, which are quite different from the problems the physician meets ordinarily. He must be familiar with all the factors affecting the health of employes, with the sanitation of factory and home, with the workman's food and his habits. with the occupational diseases, and with the effects of fatigue and long working hours. Provision should be made for the special training of physicians and surgeons through the establishment of university departments, graduate courses, and endowed research institutes. The industrial physician must be attentive to the rising standards of medicine, for he is the molder of opinion in behalf of preventive medicine.

An experiment now being carried on in Glasgow is, therefore, of special interest. Dr. David McKail, lecturer on public health at St. Mungo's College, and Mr. William Jones, clerk and treasurer of the Glasgow Insurance Committee, have worked out a plan for a public medical service as a substitute for the social insurance scheme now in operation. Beginning with a criticism of social insurance, which they condemn for failure to provide any form of institutional treatment and for furnishing medical service to only about one-third of the total population, they propose to build up a complete medical service, furnishing unrestricted treatment to every citizen needing it, and involving the enrollment of the medical profession and the public control of all general hospitals and infirmaries.

The proposed plan is founded on the experience gained in efforts to meet war conditions, when for a time dispensaries were established in Glasgow for centralizing the patients of absent physicians. The city was divided into districts. and a consultation center established in each. The Bridgetown District, with approximately 100,000 inhabitants is taken as a convenient unit for study. The volume of sickness is shown by the number of dispensary visits is found to be 3.11 per person per year, varying from a maximum of 7.5 visits for the year of life to a minimum of 1.32 for ages from 15 to 25. House visits are found to amount to one-fourth of dispensary visits. This amount of professional work would require twenty-seven physicians,

working thirty-three hours a week. A 25 per cent addition for seasonal increases would necessitate a staff of thirty-three physicians, each of whom would have an annual vacation in the summer or fall. Births would average nine or ten a day, requiring four obstetricians. Minor surgery and various specialties would require six, making a total staff of forty-three medical men, exclusive of institutional and consultant service.

These men are to be graded in three classes, according to age, experience, etc. Each junior would be allowed time and be required to do graduate medical work and special study with a view to his advancement in the service. Salaries would range from \$1,500 to \$2,000 for juniors, \$2,500 to \$3,500 for middle grades, and \$4,000 to \$4,500 for seniors. Provision is also made for dentists and for dental treatment.

The advantages for the physician of the proposed public medical service are the limitation of working hours, the guaranteed adequate income, the avoidance of waste of time and energy, the opportunity for increased income, the accumulation of experience, and the opportunity for graduate and special work for every practicing physician. The advantages claimed for the individual are better treatment at a much less expense and for the community, economy of administration, and the prevention of a large amount of disease. The London Lancet, in commenting on the proposed plan, expresses the hope that the authors may have an opportunity of testing it, as success or failure would alike afford much needed experience.

It has frequently been stated that scientific medical diagnosis and treatment are a privilege accorded only to the very poor and the very rich. The recent establishment of diagnostic clinics and diagnostic institutes indicates that the principle of group practice is being recognized to a greater extent than has heretofore been the case. The general hospitals have for many years been diagnostic institutes for group practice, a fact which is sometimes not remembered by those who proclaim that group practice represents a new principle. The diagnostic clinic of the present day is, however, not a hospital but an ambulatory clinic, the idea being that many patients who do not care to go to hospitals and who do not need to do so can have their ailments studied at such an institution. A perusal of the charges for service made by some of these institutions indicates that while they have doubtless solved the problem of medical cooperation they have not completely solved the financial problem of the patient. The fee for a general examination is a modest one well within the reach of the average citizen who falls into neither the pauper class nor the group of the wealthy. More complicated examinations, such as are necessary in patients with obscure diseases, cost a sum which in many

instances would be quite beyond the means of the average wage earner. The question of obtaining efficient medical diagnosis and treatment for cases of obscure disease among those who can pay only a modest fee is one of the live questions of the day. It is doubtful whether it can be met by diagnostic clinics unless they are heavily subsidized organizations along the lines of the existing dispensaries, but differing from them in the fact that a small fee is charged. Attempts have been made to meet the situation in this way, but as yet there has been no widespread effort to care for the man of modest means. As individuals of this group furnish the great bulk of patients, some machinery must be devised which will enable them to receive inexpensive but adequate care when they develop obscure diseases.

231-2-3-4 State Nat. Bank Bldg.

Dr. Carleton Simon, noted alienist and criminologist, has been appointed a special deputy police commissioner of New York City by Police Commissioner Enright, having charge of all cases in which drug users are involved.

A Real "Doctors' Hope"—The most promising "hope" we have seen in recent years is being promoted by the Danciger Bros. Oil and Refining Co. of Kansas City, on page 60, this issue. This development plan will stand the most rigid investigation, and the entire proposition is surely convincing. The reputation of this sterling company is behind the plan, and we would urge our readers to send for literature at once. The list will soon be closed, and all orders for units are subject to previous sale.

A Novel Theory—Camille Flammarion, French philosopher and psychic investigator, and probably the most widely known astronomer in the world, has recently been quoted as saying that Americans are depriving themselves of the possibility of communicating with the spirits of their dead by the practice of cremation. His book, "The Unknown," a new edition of which was recently published by the Harpers, is the result of his earlier investigations in the field of psychic phenomena.

Clinics at the K. C. General Hospital—The Jackson County Medical Society will hold a "clinic night" at General hospital November 30. The purpose of the clinic will be to present interesting cases and operations which will be followed by a general discussion of the methods of treatment. It was announced yesterday by Dr. W. L. Gist, superintendent of General hospital, that an effort will be made to hold clinics at the hospital at regular intervals. To arrange for the meetings this committee has been appointed: Dr. C. B. Francisco, chairman; Dr. Frank Neff and Dr. F. R. Teachenor.

Continuing "The Medical Fortnightly and Laboratory News."

Medical The Herald

and Electro-Therapist

Incorporating the

Kansas City Medical Index-Lancet

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Vol. XXXIX

NOVEMBER 15, 1920

No. 11



Buchanan County X-Ray Meeting

The most attractive meeting enjoyed by the profession of St. Joseph and contiguous territory was held at the Elks Club House Oct. 27. The evening was devoted to the consideration of advanced x-ray work and to the therapeutic utility of radium. The attendance was a capacity house in appreciation of the national reputation of the speakers. The presentation of topics consisted of lectures and the exhibition of pic-

Dr. O. H. McCandless of Kansas City gave a very illuminating resume of gross findings in gastro-intestinal diseases. Dr. Albert D. Davis, B. Sc. D. D. S., of Omaha, gave an illustrated lecture on Surgical Principles of the Mouth, with slides. Dr. E. H. Skinner, of Kansas City, gave us the benefit of his vast army experience in the analysis of Roentgen negatives in bone disease. Dr. Geo. E. Knappenberger, of Kansas City, lectured on the radium treatment of carcinoma of the uterus. Dr. A. F. Tyler, B., Sc., M. D., F. A. C. P., of Omaha, outlined the present status of x-ray therapy. The Buchanan County Society keenly appreciated the courtesy of the lecturers, and realize the immense advantage of such spe-

cial occasions, and their helpfulness toward our clinical sessions. The program was so long that no time was devoted to discussion. The members of the society take pleasure in publicly expressing their appreciation to all who partici-J. M. B. pated in the program.

St. Joseph Eve, Ear, Nose and Throat Club

The St. Joseph Eye, Ear, Nose and Throat Club has had some interesting and instructive meetings this season. Dr. C. W. Bertram read a paper on the physiology and pathology of the voice and speech from a practical standpoint. He elaborated the therapeutic side of the various conditions as seen in the practice.

Dr. W. L. Kenney demonstrated the use of the various tonometers in cases of glaucoma, and gave his experience in abnormal cataract cases.

Dr. P. I. Leonard demonstrated the anatomy. physiology and pathology of neuro-auditory conditions in relation to vertigo, loss of equilibrium.

Dr. W. H. Minton explained the comparative anatomy of the eyes of animals, and the accommodation of the human eye, normal and patho-

Dr. W. C. Proud demonstrated on a dog the recent instruments used in direct laryngoscopy and bronchoscopy, and read a paper on the sub-

Dr. E. C. Renaud read a clinical report of various interesting eye cases, explaining methods of diagnosis in difficult cases, the treatment employed and the ultimate result. At the various meetings cases are introduced for diagnosis and discussion.

Dr. W. B. Tadlock is on the program for the next meeting. The society has a lunch and other refreshments after each meeting, combining a pleasurable with a profitable time. P. I. I.

The Doctor Ignored

No doctor's name yet in the Hall of Fame. It would be illuminative and interesting to know just the definition of fame which possessed the minds of the founders of the Hall of Fame, and the spirit which dominates the selecting committee as they convene to consider new names to be added. It may be that medical men who participated in the foundation of this country, who signed the Declaration of Independence, who aided Washington in his fundamental work in battlefield and assembly hall, who founded a university or who laid the corner stone of American medicine, who drove cholera and yellow fever out of Cuba and Louisiana, who have made possible empire building and the construction of the world's greatest canal, who have augmented commerce, adding wealth, population and health to our country—it may be considered by the committee that these names will live forever, that they are engraved upon the hearts and minds of all intelligent citizens and hence need no heralding. Such is the case. These names will stand eternally. Yet, if there be a Hall of Fame are these national benefactors to be passed over for writers of verse and fiction, men who have pleased the multitude, men whose nursery rhymes have made laughter while their medical contemporaries have offered their skill, learning, energy and very lives to render more solid the foundation of our nation, the sacred home more sanitary, life longer, happier and more beautiful? The inadvertant injustice takes us back to early childhood. Mother washes us, dresses us, makes us obey, fills our eyes and ears with soap in order that we may be clean and presentable when father comes home. Father plays with us, trots us on his knee and gives us a penny and we are papa's baby. Are those who do us good as keenly appreciated as those who please us? The king or the king's jester? Is there no element of justice in human nature? J. M. B.

More Good Luck for the Doctors

The "Doctor's Hope No. 4," an oil well near Peabody, Kas., came in November 11, and produced an Armistice day flow of 2,000 barrels of oil at a depth of 2,385 feet. This is the third triumph of the enterprise, which is a syndicate of thirty physicians and nurses, many of whom live in Kansas City and the majority of whom were in service during the World war.

The project was launched June 16, 1920, when the syndicate leased the properties near Peabody and named it the "Doctor's Hope," and it has developed into a paying venture for the stockholders. The first well, "Doctor's Hope No. 1," produced a flow of 600 barrels of oil a day, July 8, and "Doctor's Hope No. 2" produced 1,000 barrels, August 15.

Dr. J. C. Wilhoit, Manhattan, Kan., was the prime instigator of the project. He is 36 years old and has become a multi-millionaire during the last two years in the oil business. He was born in St. George, Kas., and formerly was physician and surgeon for the Kansas state agricultural college at Manhattan. Dr. Wilhoit came to Kansas City last summer and succeeded in interesting Dr. Allen L. Porter, Dr. S. B. Hibbard and Dr. Edwin C. White in the "Doctor's Hope" project, after which the syndicate was formed. Dr. Wilhoit made a special endeavor to secure persons who had served in the World war interested in the venture.

The stockholders in the venture include Dr. Allen L. Porter, Dr. S. B. Hibbard, Dr. Edwin C. White, Dr. S. S. Glascock, Dr. J. W. Odsley, Dr. C. J. Hunt, Dr. E. F. DeVilbiss, Dr. G. Wilse Robinson, Dr. R. B. Platte, Dr. Russell Porter, Dr. M. A. Hanna, Dr. L. Lee Roberts, Dr. I. R. King, Junction City, Kas.; Dr. Samuel L. Hibbard and Dr. Clemmens Rucker, both of Salina, Kas.



Dr. Woodson Moss, one of Missouri's most beloved physicians, died at his home in Columbia, October 5, aged 68 years. The cause of death



DR. WOODSON MOSS

was a ruptured aorta, following a tonsil operation. Dr. Moss was president of the state association in 1902.

Dr. John W. Duke, president of the Oklahoma State Medical Society, died at Guthrie, October 10, aged 52 years.

Dr. Lemuel T. Hall, formerly superintendent of the State Hospital for the Insane No. 1, at Fulton, Mo., died recently at his home in Potosi, Mo., aged 79 years.

Dr. Isadore Dyer, one of the editors of the New Orleans Medical and Surgical Journal, and leading dermatologist of the South, died of heart disease, October 12, at his home in New Orleans, aged 55 years.



Dr. A. R. Timerman, of St. Joseph, was elected coroner of Buchanan County on Nov. 2.

Dr. Daniel Morton, of St. Joseph, was recently elected a corresponding member of the Jackson County Medical Society.

Probably the Mississippi hospital patient who threw away \$10,000 worth of radium got tired of carrying so heavy a load on his cheek.

Dr. M. P. Ravenel of Columbia, director of Preventive Medicine at the State University, was elected president of the American Public Health Association at the annual meeting held in San Francisco recently.

The Real Cause--The telephone caused the war, says an author in The Living Age. There may be something in this theory in view of the effect telephones have on the temperature of even the best natured of us.

Pipe Dreams in Danger—The Pennsylvania Division of the Women's Christian Temperance Union, at its forty-sixth annual meeting held Oct. 20, ratified the national program for a campaign against the use of tobacco.

Dr. C. W. Burrill, of Kansas City, was elected surgeon-general of the Grand Army of the Republic at the national encampment which was recently held in Indianapolis. Dr. Burrill was medical director, Department of Missouri, of the G. A. R., in 1919, and was reelected to that position this year. He has practiced in Kansas City for over forty years and was elected an honorary member of Jackson County Medical Society last February.

When the Doctor Takes to the Woods—From Topeka, Kans., comes word that the women folks, resenting the demand of male election officials that they must state their age the same as men, when registering, have organized a "21 Plus Club." Under the by-laws of this club, the ladies, whether sixty, or fair, fat and forty, when asked in future by inquisitive officials how old they are, will answer with a wink of the eye "21 Plus, Sir." If the ladies persist and the idea spreads nation wide, as is threatened, a wag proposes that we have doctors at the polls to give the fair voters "the once over" and estimate for the records how long they have been out of cocoon. A new job for the doctor! Every dollar helps. But suppose the lady is 30 and the doctor estimates 35 and the lady finds it out! There'll be murder up Sixth street, and it will be the doctor for the woods quick! Every silver lining has its cloud. -R. & C. Med. Pocket Quar.

Restoration of Margin of Eyelid—A case is cited by John N. Wheeler, New York (Journal A. M. A., Oct. 16) in which a successful restoration was made by a free graft from the lower part of the eyebrow and the skin directly below it.

New Officers—The Tri-State District Medical Society, at its annual meeting in Waterloo, Iowa, elected the following officers for the ensuing year: President, Dr. G. V. I. Brown, Milwaukee; president-elect, Dr. John E. O'Keefe, Waterloo, Iowa; vice-presidents, Drs. Walter L. Bierring, Des Moines, Iowa; Joseph S. Evans, Madison, Wis., and Edwin P. Sloan, Bloomington, Ill., and secretary-treasurer, Dr. Domer G. Smith, Freeport, Ill. (re-elected).

Annual Meeting—At the twenty-fifth annual meeting of the American Academy of Ophthalmology and Otolaryngology, held at Kansas City, Mo., Oct. 15, 1920, the following officers were elected for the ensuing year: President, Dr. Emil Mayer, New York; vice-presidents, Drs. John R. Newcomb, Indianapolis; Robert Ridpath, Philadelphia, and W. C. Finnoff, Denver; treasurer, Dr. Secord H. Lodge, Cleveland; secretary, Dr. Luther C. Peter, Philadelphia, and editor, Dr. Clarence Loeb, Chicago. The next meeting will be held in Philadelphia.

United States General Hospital No. 43, at Fox Hills, Staten Island, has been closed by the War Department. A part of the hospital facilities will be operated by the United States Public Health Service for the care of wounded ex-service men under the war risk insurance arrangement. The hospital, which covers 250 acres and comprises more than 150 buildings, has been inspected, according to rumor, by representatives of the Ford Automobile Company with the view of transforming it into an automobile factory.

The Right to Happiness — I should advise American mothers to keep the pursuit of happiness out of their daughters' constitution if they cannot keep it out of their country's. A girl who is given to understand every minute that she has a right to a good time is sure to declare before long that she wonders when the good time is coming, even if she has it at every hour. Do not make fastidious artists in happiness. Keep on the safe Puritan side; it does not always mean thin lips and spectacled eyes shooting reproach around at random. I am afraid the idea of happiness is made an obesession by a great deal of apparently moral literature. There is certainly a relation between the mushy advice daily doled out to hair splitting girl questioners by dozens of Aunt Margarets or Cheery Mabels and the stuff we read last March in the pitiful dairy of that Ruth Somebody who killed herself in Chicago because, she said, happiness was only a word.— Ernest Dimnet in Harper's Magazine for Novem-



GYNOPLASTIC TECHNOLOGY with chapter on "Sacral Anesthesio," by Arnold Sturmdorf, M. D., clinical professor of gynecology, New York Polyclinic Medical School; consulting gynecologist to the Manhattan State Hospital; fellow of the American College of Surgeons; fellow of the American Medical Association, etc. "Illustrated with 152 halftone and photo engravings in the text, some in colors, and 23 full page plates, with 35 figures, all in colors. Philadelphia: F. A. Davis Company, 1919. Price, \$5.00.

The evolution of technologic progress and the promulgation of its advanced basic conceptions, must of necessity contend with prevailing principles of practice, some of which are founded on theories of pathology long abandoned, some due to misdirected research, while others present the mere relics of an obsolete dogma no longer to be defended in either theoretic or practical grounds. Attempts at plastic restoration of the injured birth canal present the very genesis of gynecologic surgery. As an art these reconstruction procedures have been highly developed, but as a science the technologic principles standardized by Sims, Emmett, Hegar and Schroeder are not tenable. The present volume embodies an elaborated compilation of the author's previous publications in various phases of gynecoplastic technology. An added advantage exists in the presentation of each topic in monographic form, as better adapted to the exposition of its controversial aspects. large number of colored plates, anatomic and microscopic help much to make the work attractive.

J. M. B.

ELECTRO-THERAPEUTICAL PRACTICE—A ready reference guide for physicians in the use of electricity and the x-rays. Twenty-first edition; by Chas. S. Neiswanger, M. D., president and professor general electro-therapy Illinois School of Electro-Therapeutics, Chicago Hospital College of Medicine, late professor electro-therapeutics Chicago Post Graduate Medical School, Bennett Medical College and Illinois Medical College. Chicago Medical Book Co., Chicago, publishers. Price, \$4.00.

Dr. Neiswanger's book has reached its twenty-first edition which in itself shows its popularity and acceptance by electro-therapists as standard authority on the subject of which it treats. Each succeeding edition has kept pace with the rapid advancement in electro-therapy and the twenty-first is no exception. The author is a pioneer in electro-therapeutic methods. His long experience in practice and as a teacher make his writings extremely valuable to the profession. The book is up to date on modern physics of electricity as well as therapeutical application. The first edition treated principally of therapeutical application of Galvanism, Faradism and Franklinism, and a comparison of it with the 1920 edition goes to show the great advancement along electro-therapeutical lines that has been made in recent years. In the introduction the author says "Progress needs a brakeman but the brakeman should not occupy all his time in putting on the brakes." Some brakemen of the profession seem to be spending the best years of their lives trying to convince their few remaining patients that electro-therapy is a fad.

The chapter on Physical Therapeutics in the army is written by Leslie E. Sammons, M. D., who organized the clinics of the physio-therapeutical department of the army. He treats the subject in language of one who knows what he is saying. To any member of the medical profession this one chapter is worth many times the price of the book. It is a book of 304 pages with many illustrations. It is a neat, handy volume with flexible cover and its contents make it a valuable book to every practitioner of medicine.

B. B. G.

THE MEDICAL CLINICS OF NORTH AMERICA—March, 1919. W. B. Saunders Company.

This is an unusually attractive issue of this very popular periodical. The articles cover a wide scope of clinical subjects, are clearly presented and so ably analyzed as to give to the reader a very clear comprehension of the malady. The volume contains a number of very telling cuts, one a colored plate illustrating Cutaneous Pigmentation. The review of "Commonly Met Skin Lesions," by C. J. White; the article on "Gastric Ulcer,' by Franklin W. White, and the contribution on "Ptomain Poisoning," by M. J. Rosenau, are of special value and interest to the general practitioner. The latter article is well worth the subscription price, and must be read by every medical man. Clearing the atmosphere of a misconception very generally prevalent, its perusal may put an end to the almost universal diagnosis of ptomain poisoning. This term has almost earned its everlasting repose in the discard pile along with rheumatism and neurasthenia. J. M. B.

THE MEDICAL CLINICS OF NORTH AMERICA—May, 1919. Index number. W. B. Saunders Company.

A very attractive volume for the internist. Baltimore number and an index number, containing clinics by some of this country's strongest men. One of the most illuminative articles is that on Funicular Myelitis, or Combined Sclerosis of the Spinal Cord, by Lewellys F. Barker of Johns Hopkins. There are a number of most profitable clinics on digestible disturbances, extra gastric diseases and nutrition, by Friedenwald, Brown, King, Gaither, Freeman, Hamman. Articles in this popular field from Hopkins are welcomed by the profession. Some very well balanced clinics on influenza and tuberculosis, equally attractive fields are contained in this number presented by Ruhrah, Clough, Bloomfield, Hamman and Krause. It is a difficult matter to compare one issue of this very popular publication with another. Each one is so perfect in subject matter and quality one fears to lose a single issue. J. M. B.

THE INTERNATIONAL MEDICAL ANNUAL—A Year Book of Treatment and Practitioners' Index, 1919, 37th year. William Wood and Co., New York. Price, \$5.00.

An ideally valuable book for the busy doctor, and for those who buy books sparingly and carefully. subjects treated cover the broad field of medical practice in all its aspects. The views, opinions, outlined treatments are taken from most reliable men and institutions. It presents in most tangible form an epitome of medical practice of the year, taken from leaders in medicine the world over, and so ideally indexed that no time is lost in at once putting one's finger upon the point sought for. An introduction of 12 pages by the editor is classic and must be read to appreciate what follows. The list of illustrations is voluminous and illuminative. They greatly enhance the value of the work. The volume is one that will add completeness to any library, both as. indicating historically the advances of a wonderful period and as a reference work. The editors, surgical and medical, are both to be commended for the completeness of the survey and the intrinsic value of the contents to all medical men.

NOTE—The Medical Herald's Kansas City office will supply any book reviewed in this department at publisher's price, prepaid. We can also supply any book by any publisher in the world. If an order for two books be sent at any one time, the purchaser will be entitled to a six months' subscription to the Herald. This plan is arranged for the convenience of our readers, and we trust it will stimulate trade in the direction of good books.—Editor.

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Small wonder that doctors everywhere use DIONOL more and more. The results are decidedly unusual. Send for literature giving scientific rationale. Many other results equally gratifying are given.

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Send for reprint of this remarkable case which Dr. L. voluntarily sent to a prominent medical journal, after healing these unusually leep burns with Dionol. Many other well known remedies were used in vain for months.

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Dr. C. writes: "A shrapnel wound in the foot of a Canadian soldier had failed to heal under any other treatment. Naturally I had little hopes of helping him. So gave him some Dionol temporarily, with instructions. Sometime after he came in and showed me that Dionol had healed the wound completely. No use saying I was surprised."

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Jaundice—In simple hepatic jaundice, as well as in the so-called catarrhal jaundice, Chionia gives uniformly satisfactory results. This is because it is a true cholagogue without purgative action. One to two teaspoonfuls three times a day will soon cause the bile to flow freely, with early restoration of the detoxicating action of the liver.

Reduced Price of Autogenous Vaccines—The Beebe Laboratories will now prepare autogenous vaccines for five dollars (\$5.00) instead of ten dollars (\$10.00) as in the past. This reduction in price is not due to any reduction in the cost of production. As a matter of fact, it costs more than five dollars to produce an autogenous vaccine in the way that it is done in the Beebe Laboratories where the greatest care and precision is used and each vaccine treated in a personal way and as an individual case, not a bulk proposition.

Healing Hemorrhones are soluble suppositories of medicated and solidified glycerine. They relieve piles promptly soothing pain and spasm, act as a tonic to inflamed tissues and render the knife or ligature, in many cases, unnecessary. They are small in size and are easy to use—for delicate women, invalids and aged persons they are invaluable. The remedies employed in the Hemorrhones are of a healing, antiseptic astringent, sedative and absorbent character; no opium, cocaine or other injurious remedy is used and there is no danger of their continued use creating any "drug habit." Price per box (24 Hemor

rhones), \$1.00. If your druggist does not keep Hemorrhones on stock remit us the price and we will send you prepaid a full size box with full directions for use. C. B. Moyer & Co., 140 N 11th St., Philadelphia, Pa

An Autumn Cold-"The common cold, so considered, of the autumn months, often proves in the end to be one of the greatest menaces to health. Should the cold be neglected and receive no attention at all, it may cause some permanent respiratory disorder or some disease of the secretory and excretory apparatus. Physicians are often able to trace directly back to an autumn cold, nasal and bronchial catarrhs, disorders of hearing, the beginnings of nasal turgesences, and the enlargement of the tonsils and other glandular structures of the fauces. That form of autumnal cold which partakes much of the character of la grippe, or occurring in a subject who at some time has suffered from influenza, is one that is of frequent occurrence. It should never be regarded as a simple matter, but should be carefully and guardedly treated. Many cases of asthma in the middle-aged. when the forces of life are low and the powers of life waning; many catarrhal affections of the bowels; many a case of recurrent croup; and many serious and often deadly cases of nephritis may trace their origin to the autumn cold, and usually to the neglected or to the overdrugged cold." Tongaline, from the character of its ingredients, is bound to possess special alterative and eliminative action, with positive affinity for the excretory system of glands, necessarily producing a thorough elimination of the toxic and morbific products of the system through the various emunctories. In the treatment of colds Tongaline thoroughly acts as an efficient alterative, eliminats toxemia, removes the causes and hastens recovThe Management of an Infant's Diet

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Mellin's Food	1	Fat	49
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8 fluidounces)	1		100 00

The principal carbohydrate in Mellin's Food is maltose, which seems to be particularly well adapted in the feeding of poorly nourished infants. Marked benefit may be expected by beginning with the above formula and gradually increasing the Mellin's Food until a gain in weight is observed. Relatively large amounts of Mellin's Food may be given, as maltose is immediately available nutrition. The limit of assimilation for maltose is much higher than other sugars, and the reason for increasing this energy-giving carbohydrate is the minimum amount of fat in the diet made necessary from the well-known inability of marasmic infants to digest enough fat to satisfy their nutritive needs.

MELLIN'S FOOD COMPANY,

BOSTON, MASS.

Mixed Tumors of the Throat, Nose and Mouth-G B. New, Rochester, Minn. (Journal A. M. A., Sept. 11, 1920), reviews the cases of mixed tumors of the head and neck seen at the Mayo Clinic from 1912 to 1918. sixty-eight in number, especially with reference to the various locations. The history and clinical findings are outlined. The etiology of mixed tumors is obscure, but several theories regarding their possible source are presented. Diagnosis of mixed tumors in some cases must be made microscopically; but in the pharynx, palate, and the submaxillary and parotid regions, a clinical diagnosis, found to be correct on microscopic section, is not difficult to make. treatment of the mixed tumor is surgical. The methods that are used for the tumors in various locations are described.

The Treatment of Shock-That the surgeon has in Adrenalin a dependable means of combating shock has been known to the profession for a number of years. As long ago as 1909 Mummery and Symes announced their observations on the effects of Adrenalin upon the blood pressure and recommended its use by the slow and continuous injection of a very weak solution into a peripheral vein. They also found that the action of Adrenalin is enhanced by the coincidental administration of pituitrin, this procedure producing a more marked effect in shocked animals than in normal subjects. In our advertising section, under the title "Adrenalin in Medicine," will be found a brief review of the plan of treating shock with highly diluted solutions of Adrenalin Chloride, by intravenous infusion and by "centripetal arterial transfusion," after the method of Crile. This little essay is the third of a series of concise and informative papers published in this rather unconventional form by Parke, Davis & Co. We have no hesitation in

commending these meritorious articles to the consideration of our readers.

The Importance of Nutritive Repair in the treatment of all bodily disorders, associated with loss of weight and general vitality, is too patent to need more than passing emphasis. The question of how best to bring about such a desirable result is, however, one that the physician is daily called upon to answer, and upon his ability to "build up" his more or less devitalized patients will largely depend his success in the treatment of chronic affections. Taking, for example, a patient suffering from pulmonary tuberculosis in the incipient or secondary stage, what are the approved measures to adopt to bring about improvement of nutrition and a consequent gain of weight and strength? All phthisio-therapists now agree that the therapeutic trinity of salvation for the tuberculous invalid is composed of: 1-Fresh, pure air, in abundance, both night and day; 2-A properly balanced ample supply of nutritious food; 3—Plenty of rest, especially during the febrile period. While medication is useless, unless the patient is properly fed, "ventilated" and rested, as above referred to, there is no doubt that intelligent medical treatment, designed to promote nutrition, is indicated in a majority of cases. If the tuberculous patienet has been neglected, for any length of time, some degree of anemia is almost always present. In such cases, an absolutely bland, non-irritant, readily tolerable and assimilable form of iron, such as exists in Pepto-Mangan (Gude), cannot be but of benefit, by stimulating the formation of erythrocytes and hemoglobin, and thus augmenting the oxygen-bearing patency of the blood. Metabolic interchange is thus quickened, better absorption and assimilation of food follows. and as a consequence, nutritive repair is encouraged and hastened.

Tetanus Antitoxin Diphtheria Antitoxin Acne Vaccine (Mixed) Colon Vaccine (Acne) Pneumococcus Vaccine Pneumo. Antigen (Therapeutic) Streptococcus Vaccine Strep. Pneumo. Vaccine 18 Staph. Vaccine (Mixed) Ozena Vaccine (Mixed) Pertussis Vaccine Pertussis Vaccine (Mixed) 29 Urethritis & Cystitis Vaccine Respiratory Vaccine Influenza-Pneumo. Vacc. (Mixed) Typhoid-Paratyphoid Vacc. Colon Vaccine (Mixed)

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The Dietotherapy of Diabetes—The question of how, and what, to feed the diabetic is a most important one. In the endeavor to restrict the intake of harmful food elements, the diabetic menu is too often narrowed down to a degree that worke unbearable mental hardship on the patient and often seriously weakens his body. In particular, he keenly feels the deprivation of bread made from ordinary flour. In the diabetic, perhaps the strongest and most insistent of all cravings is that for a slice of the once commonplace, every day bread, now prohibited. It is here that Lister's Diabetic Flour proves its great value. Not a gluten flour, but evolved from a blend of readily assimilated caseins—absolutely starch_free, sugar-free and purin-free—and easily made into nourishing, satisfying bread, as well as appetizing muffins, noodles, dumplings, French toast, cookies, etc. Lister's Diabetic Flour is superior for many reasons. It is self-rising and put up in a moisture-proof, carefully measured, small packages, which is of great assistance to both physician and patient. Each package is accompanied by easily followed recipes for making a number of appetite-tempting, strictly non-carbohydrate dishes.

A New Department—Beginning with the January issue, the Medical Review of Reviews of New York will inaugurate a new department for the advancement of the science of Chemo-Therapy. In order to develop the theories as set forth by the various investigators who have thus far entered this field, we invite the cooperation of all physicians, chemists, bacteriologists and pharmacologists who are doing or contemplate doing work along these lines. It is our purpose to stimulate a more thorough fundamental

knowledge of this subject, which so far is little known to a great number of practicing physicians. Believing Chemo-Therapy to be a rich field for the development of products of great therapeutic value, and that we have so far neglected to give it the importance that past researches would warrant, we are placing this department at the disposal of all those who may find an interest in the subject, as an open forum where contributions dealing with this science will be welcomed.

Syrup Leptinol has specific action in all coughs whether due to acute or chronic conditions. It contains no narcotics and is harmless in any dose.

A Seasonable Suggestion-Winter having set in, coughs and colds are on the increase and we are therefore reminding our numerous medical friends of our old reliable Pautauberge's Solution of Hydrochloro-Phosphate of Lime and Creosote. The creosote in this solution is not supposed to kill the tubercle bacillus, but to so modify the conditions of environment as to make these unsuitable for its development. Its chief activity is in the gastro-intestinal tract, which it puts into better shape, thereby improving intestinal metabolism. The hydrochloro-phosphate of lime builds up the system and supplies the salts, which are usually deficient in tuberculous subjects. Under the use of Pautauberge's Solution the general symptoms are ameliorated, appetite improves, the patient gains strength, and cough and expectoration are often remarkably reduced by means of lessening bronchial secretion. We hope that our medical friends will not let the winter pass without giving this preparation a thorough test in their practice as we are convinced that the results will be satisfactory to them.

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In malarial conditions a diuretic is not indicated soften as the symptoms suggest, as one always has o contend with a torpid liver that is throwing a part if its work on the kidneys, meaning double duty for he latter. In such cases the rational treatment is to use some agent which will stimulate all the excreory organs, dividing the duty of each and causing horough elimination. Tongaline either alone or in ombination with other agents, as indicated, will invariably expel the malarial and other poisons prompty and thoroughly.

Calcidin-The march of the months is bringing is nearer to winter and cold and respiratory complaints. Before long the leaves will be falling. It is well to anticipate the seasonal tasks, thus well in dvance, to be thinking how better to engage them when the time comes. The old saying is not forgotten which enjoins us not to cross our bridges before we come to them. But worry is one thing and intelligent reparation is quite another. In the winter season, f any one remedy can be allotted an outstanding posiion as regards the general need for it as compared o other remedies, it probably is the iodine preparaion given us long ago by The Abbott Laboratories, Chicago, under the name of Calcidin. It is also known as calcium iodized, being a compound of iodine and pasic lime. In general, it serves where the iodides are used; it may well be given in their stead for the eason that it is better borne. But its best work is lone in acute respiratory ailments. It is useful in pronchitis. For catarrhal croup there is probably no better remedy, pushed to effect. Calcidin is now available in troches, combined with anesthesin, a opical anodyne similar in action to cocaine but it is virtually non-toxic. This troche or lozenge is very effective for allaying throat soreness and irritation. Samples will be sent on request to The Abbott Labora-





"Good Things to Come"—Be sure to read the list of original articles shortly to appear in this magazine. You will find a widely varied list of interesting topics. See adv. page 68.

"Poems the Doctor Should Know"—16 pages, 45 poems of war, love and patriotism, including the immortal poem, "In Flanders' Fields," by McCrae, and several answers to its challenge. Price 10 cents a copy, three for 25 cents. The Medical Herald, Ridge Building, Kansas City, Mo.

To Herald Subscribers—Please bear in mind that our subscription rate will be advanced to TWO DOL-LARS per year on January 1st. You may subscribe for one to five years at the dollar rate, if you wish, providing you do so before December 31. "A word to the wise," etc. Do it today.

Intravenous Medication—If you wish to give your patients the benefit of the latest, up-to-date treatment for anemia, syphilis, and skin diseases, write for clinical data to the New York Intravenous Laboratories, 110 East 23rd street, New York City. See announcement on page 59, advertising department of this issue.

Pneumococcus Antigen-Another factor in addition to those usually operating in the production of inflammatory edemas has a role in the formation of the pneumonic exudate. The pneumococcus poison exerts a harmful action on the cement substance of the endothelial cells, thereby permitting an increased permeability for various serum constituents with their accumulation in the alveolar spaces of the lungs. Recovery from pneumonia is dependent on the destruction of the bacteria and the removal of this large excess of fibrinous and cellular detritus. It is, therefore, in all its essentials an autolytic process in accord with the law of mass action to keep the blood proteins constant, to rid the lungs of foreign proteins and to restore the physicochemical equilibrium of the body fluids. While the inhibiting factors are in the ascendency—the toxins of the invading pneumococci-the material undergoes very slow autolysis with the protein splitting proceeding only to toxic products, which are absorbed as such and give rise to the symptoms of the disease. With the liberation of larger amounts of a ferment through the disintegration of the accumulated leucocytes, and with the blood serum subjected to conditions which bring about a lowering of its intiferment content, it is to be expected that at some moment, the ferment-antiferment balance will be destroyed and autolysis become rapid with complete digestion of the proteins. The equilibrium of the system described is governed

by the law of mass action, hence the change from febrile toxemia to the afebrile, atoxic state is necessarily an abrupt one—crisis. Our hope of thera peutic results must not only be based on the idea o overcoming the infecting organism, but also of favorably influencing the autolytic changes. Experi ence with partially autolyzed pneumecocci (Pneumococcus Antigen, Rosenow) gives convincing evidence of accomplishing these two things and of therefore exerting a very favorable action on the disease pro-cess. When given early, the salutary effects are especially gratifying. The crisis following such early administration is similar to that which occurs natu ally. There is also a rapid increase in the number c demonstrable antibodies in the blood. Its harmless ness has been established. The verdict of physicians qualified by the use of this antigen to pass judgment is that it cuts short the disease process, makes the patient more comfortable and minimizes the occurrence of complications. Pneumococcus Antigen is prepared by Eli Lilly & Company in accord with the formula and method of Dr. Rosenow. Requests for further information and literature addressed to the home office of this company at Indianapolis, Indiana, will receive prompt and courteous attention.

Syrup Leptinol, one doctor writes, "Gives the quickest relief in asthma of anything I have ever used and gives the greatest amount of permanent relief in asthma and chronic bronchitis of anything with which I am familiar."

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The Medical Herald and Electro = Therapist The Kansas City Medical Index-Tancet

An Independent Monthly Magnatus

VOL. XXXIX

DECEMBER, 1920

No. 12



THE USE OF THE ULTRA VIOLET LIGHT IN TREATMENT OF TUBERCULAR ULCERS AND SINUSES WITH CASE REPORTS*

J. H. EAST, M. D., Denver, Colorado.

Before reporting a few cases, I desire to state some conclusions from eminent workers in the use of ultra violet light, and I desire you to remember I am not posing as authority, but as a condenser, and bring into action some special points to show what can be done by perseverance in the use of ultra violet light.

It has for a long time been known that the mercury vapor arc emits chemically active ultra violet rays in large quantities. I use the rays as produced by the Heraeus quartz lamp. The mercury in the quartz tube is brought to a much higher temperature than is possible in glass tubes as the fused quartz retains its hardness at a tempertaure at which ordinary glass softens and becomes inert. The rays are allowed to pass directly through the quartz lens chemically pure while the ordinary glass absorbs the rays and the efficiency is destroyed. As a result of the extremely high temperature the quality of the ultra violet rays emitted by the mercury vapor increases in a very high degree and thus the potency is greatly enhanced. The results obtained by the use of the ultra violet rays are based on the following observations:

After first raying the torso with the radiant light so as to produce an erathema, I then use the ultra violet light, by this method the internal organism is relieved because of the blood which enables the iron and sulphur in the blood to convey an ample quantity of oxygen to the cells and carry off the carbonic acid. By so doing we get

*Read at the meeting of the Western Electro-Therapeutic Association, held in Kansas City, May 27, 28, 1920. a chemical change which helps out to a certain extent in reducing high blood pressure and producing quietness of the system, and at the same time surround the patient with ozoning air which encourages metabolism and stimulates elimination.

Now, gentlemen, I have opened up a large field and must get to a few case reports or I will get into deeper water than I feel safe in.

Case 1. A. B. D., aged 60. Had inflammation of middle ear for ten years. Had received all kinds of treatments with no relief. The discharge produced an eczematous condition about the ear and side of face, and as patient said, "Had a drumming sound in his head all night and was so discouraged he felt like taking his life." First, I cleansed the external ear with an antiseptic solution, getting middle ear as free from pus as possible, then introduced into the ear the short crystal applicator No. 2007 as far as I could and turned on current to third button. Gave daily treatments and in twenty days all pus had disappeared and head noises were gone, but gave ten more treatments to make sure. He has not returned in a month for treatments and patient looks fine and has gained fifteen pounds in weight. But has no hearing whatever in this

Case 2. F. C. From Texas, under my observation November last, on examination found tuberculosis of lungs, a badly irritated throat with two small ulcers on left side on post palitine folds. Throat very irritable and the cough was fierce. On further examination discovered a tubercular sinus almost like a corkscrew, it was so tortuous extending from internal inguinal ring to one-fourth inch from anal margin where there were four openings one to one-half inch apart, the discharge was continuous and irritating.

Found he had been under the care of some eminent surgeons and physicians who treated him in various ways, among the means was the use of vaccines, autogenous and stock, but received no benefit from any source. Surgeons refused to operate unless he would sign con-

tract relieving operator from claims for damages, stating they did not believe there would be union of parts, due to tubercular infection. This all put me on guard and I went gently into this forbidden field.

For the first two weeks I gave patient Venodine (made in Denver) intravenously and exposed entire torso to the radiant light good and strong and as hot as patient could stand it anteriorly and posteriorly. Then used ultra violet light, first day one minute on either side, increasing a minute each day until exposure to rays went up to ten or twelve minutes each day. After cleansing the ulcers or opening of the sinus I rayed region covering the parts so I could get the rays close and hot to the sinus region. After the third day I opened up the sinus one inch, and every few days thereafter opened an inch or more, and each day rayed the incision until last portion was reached when I found a bulb ending size of a caliber bean. I cleansed this out and turned on the accelerator and exposed the sinus to the rays for ten to fifteen minutes, and today, gentlemen, I have to report the sinus is healed and is entirely and perfectly smooth. I used Plank's applicator to the throat each day until ulcers disappeared. After each treatment I used 25 per cent argyrol to throat. The patient's physical condition has improved wonderfully and his cough is but very little trouble any more. Today he is one of the busiest men in Denver. He is president of one of the largest mining companies in the state as well as being at the head of several other large enterprises. He was able to do but little when I took charge of him, so I feel by the use of chemically ultra violet light I scored a ringer.

Case 3. H. E. L. Served in France during the late war and came back with the left ear discharging and the irritating discharge had produced eczema of external ear and down on to neck. All treatments he received at army hospital did little, if any, good.

I first cleansed out the discharge from external canal, then as much as possible from internal ear each day and passed the short crystal lens, No. 2007, in canal and turned on to third button. Treated each day and also exposed external ear and neck to rays from Alpine lamp for a few moments each day until external irritations was overcome and for several days thereafter for constitutional effect. In thirty days all discharge had ceased. All pain had disappeared but there was no hearing as the ear drum had all sloughed off, the terrible odor had disappeared and patient discharged cured.

Case 4. P. M. F., mining engineer. Had discharge from left ear for ten years, had tried everything recommended from the best sources and said he was under the care of an eminent

Kansas City specialist for a long time but finally was informed by him that his case was incurable.

I put him under treatment last March as above described, and in sixty days he was completely cured, but of course he cannot hear a sound with that ear. But he says he is well pleased with the one ear he has left.

Case 5. A. B. M. Consulted me last June about an ulcer. It had been diagnosed as cancer on the external canthus of right eye. It was the size of a dime, elevated and granular and very painful. I don't know that it was a cancer, I diagnosed it as rodent ulcer. Placed an applicator No. 2015, just large enough to cover the ulcer and its margin, adjusted the Kroomayer lens and turned on to third button, for ten minutes. Next day when patient returned the ulcer looked less irritable and inflamed but extremely tender. Placed patient on table, covered the face and left opening so rays from Alpine lamp would shine directly on ulcer only. Turned on accelerator ten minutes. Treated patient every other day for three weeks. When the ulcerated surface had healed and pealed off leaving a smooth surface. Result a happy patient and a well paid doctor.

The above are cases that can be seen any time in Denver.

1510 Glenarm St.

PHOTOTHERAPY*

CHAS. KEOWN, M. D., Independence, Mo.

"Light reveals the glories of the external world and yet is the most glorious of them all. It gives beauty, reveals beauty and is itself the most beautiful. It is the analyser, the truth teller and the exposer of shams; for it shows things as they are. Its infinite streams measure off the universe and flow into our telescopes from the stars which are countless millions of miles away. On the other hand it descends to objects inconceivably small and reveals through the microscope objects millions of times smaller than can be seen by the naked eye. Like all other fine forces its movement is wonderfully soft yet tender and powerful. Without its vivifying influence vegetable, animal and human life must perish from the earth and general ruin take place.

We shall do well then to consider this potential and beantifying principle of light and its component parts, for the more deeply we ponder into its inner luster the more will it present itself as a marvelous store house of power, to vitalize, heal, refine and delight mankind."—Babbitt.

^{*}Read at the meeting of the Western Electro-Therapeutic Association, held in Kansas City, May 27, 28, 1920.

When we ponder upon the influence of light upon the vegetable and animal kingdom about us and we realize that our whole existence depends upon this agent, this force, is it not strange that we have been so slow in taking it up therapeutically and using it in the treatment of the abnormal conditions in which we so often find poor mankind?

The artificial and unnatural conditions in which most so-called civilized beings live and move all tend towards light and oxygen starvation. Our clothing robs the skin of the light and oxygen that nature intended should envelope it. Our cities with our high office buildings, with rooms opening into courts and alleys, into which a ray of sunshine seldom penetrates, all tend to deprive their occupants of the required amount of sunlight and pure oxygen. Why then should we not seek to supply those who have become ill and below par through lack of these essential elements with the very elements themselves? And if we are not able to change their mode of living so as to give them to them in nature's own laboratory why not use the best artificial substitutes we have at our command? Also should we not seek to still further improve our equipment until we can furnish them with a truly adequate "condensed out-ofdoors?"

The purpose of this paper is to show that we have a truly great therapeutic agent in the use of artificial light and oxygen.

We can include in light therapy anything which we can do by the use of light rays, including the actinic rays of the mercury vapor lamps, x-rays, radiant light, chromic lights, etc.

The diagnostic uses of the x-ray are familiar to all electro-therapeutists and have become so wonderfully developed that with the present up-to-date equipment the amount of accurate and valuable information that can be obtained by an expert technician would have been unbelievable a few short years ago when Roentgenology was in its infancy. You are also familiar to some extent with the use of the x-ray therapeutically, but as this subject will be treated by some other essayist I only mention it in passing.

In my use of photo-therapy I use it in conjunction with whatever other modatities or other remedial agents I think indicated in the case at hand, and rarely do I use it by itself unless it be in some skin or superficial condition in which light therapy alone might be sufficient. Yet in many general conditions I find the use of the radiant light and the actinic rays of great benefit. In fact it is hard to name a condition or disease in which they can not be used with benefit. In this connection we might mention anemia, tuberculosis, bronchitis, hepatites, cho-

leocytites, peritonitis, mastoidites, neuritis, lumbago, pleurisy and a host of others.

The general tecnique is as follows:

Place the patient upon a comfortable treatment table, after having removed all clothing from the part to be treated and, in general conditions, preferably from the entire body, turn on your lamp, preferably a 3000 candle power incandescent or possibly an electric light bath cabinet. If using the table and large lamp let the patient take the light for ten or fifteen minutes in the one position then turn off the radiant light and turn on the air cooled lamp for the length of time you judge the patient's skin will tolerate it without sunburning. Make your mistakes in underraying rather than in over-raying if you want your patient to always have a kind regard for you. The length of time you can ray a person without sunburning them depends upon the distance of the lamp from the body, the character of current used (the alternating current giving a more intense ray than the direct current), and the character and color of the patient's skin. A fine texture blonde skin will sunburn much sooner than will a dark coarse skin. I believe it is usually safe to ray any but the fairest skins for one and one-half minutes using the alternating current at a distance of twenty-four inches from the body. However, I believe each lamp is a law to itself and you will have to accustom yourself to the equipment you have and not be governed by any rule of thumb. For instance, I have two rheostadts and when I use the Alpine lamp on one I can safely use it four minutes, whereas with the other one I could not use it over two minutes. However, a sunburn would not do any permanent damage and would only result in the discomfort of the patient for a few hours or days and therefore is not such a great bugaboo as some would have us believe. Nevertheless we wish to avoid it unless it is performed for some specific purpose. Beginning with a short raying of say one and one-half minutes the length of time may be increased daily as tolerance is developed until you can ray the skin for ten or more minutes. After raying the patient on one-half the body they are turned over and the same procedure is repeated on the other

Many times other modalities can be used simultaneously, as for instance, the tention table or almost any of the electric modalities as high frequency, sumsoidal or galvanic currents.

In treating general conditions I frequently follow up the above treatment with from twenty to thirty minutes of inhalations of nacent oxygen from a Neely-Armstrong Ozone generator.

In localized conditions the water cooled or Kromayer lamp is probably the most useful agent we have for utilizing phototherapy as it enables us to limit the rays to a small area or to throw them into small cavities such as the ear, nose, mouth, throat, vagina, etc. Also it enables us to use the actinic rays with compression to areas of not too great size and this becomes very useful in treating some forms of skin troubles, also small growths, both benign and malignant. The actinic rays penetrate into the tissues, especially when using compression, they are antiseptic or germ destroying and can be used with benefit in many suppurating conditions. They are stimulating to normal healthy tissues and are of great benefit in promoting healing of wounds and sores. In fact they are constructive to healthy tissue and destructive only to diseased tissue or when used to excess in length of treatment.

I could cite you case records to substantiate the claims I make for the recognition of this branch of electro-therapeutics but the records would probably be as open to criticism as are the statements I have made in this paper so I will say to you who would prove these things to install some phototherapeutic apparatus and test it out faithfully and you will be as delighted as you will be surprised with the results which you will obtain in many of your cases.

Battery Block.

REPORT ON STATIC CURRENTS* JAS. Y. SIMPSON, M. D., Kansas City, Mo.

As chairman of the committee on static currents, it has been my endeavor to find something interesting or new to offer you along the line of treatment with the Franklinic modalities, but I regret to say that I have failed. My search led me through the files of some of our best periodicals on electro-therapy, but with no result.

The static current seems to hold its reputation as extremely serviceable for the relief of many diseased conditions and it will probably for many years occupy its present high place as a therapeutic agent in spite of the many new modalities coming into use.

In the first half of the eighteenth century frictional electricity was the only kind known, and about the middle of this century many physicians were using it for the relief of disease.

The static machine gives a tremendous voltage but a very small amperage and can be delivered to the patients in so many different ways that it has a very wide field of application. In the form of a breeze or wave, an insulation, or a spark treatment it will give most satisfactory results in a great many abnormal conditions and cannot be replaced by any other electric modality. Some physicians think its effects are en-

tirely physical, but I believe this opinion would be readily altered if they would carefully watch the results obtained in many cases free from mental manifestations. Its marked effect upon metabolism would disprove this contention. Among the results to be obtained are the relief of local congestion and induration and the elimination of inflammatory exudates; the relief of pain; the relief of muscular spasm; the diminishing of nervous irritability; the improvement of metabolism by increasing functional activity; the stimulation of the secretory and excretory functions: the restoration of muscular tone; and the overcoming of nervous inertia. In administering treatments with the static machine it must be borne in mind that it has a polar action, the positive being sedative in its effects and the negative stimulating. During the administration of the static insulation the temperature will frequently rise from one-half to one and a half degrees. The great voltage puts the surrounding air in a state of stress breaking up the combinations of gases liberating ozone which is inhaled or absorbed entering into the circulation increasing oxidation thus purifying the blood and promoting nutrition and growth of new cell

On account of the fact that most of my patients for a number of years have been of the neurasthenic type my use of the static machine has been chiefly for the purpose of giving the insulation, breeze or spray and the Morton wave treatments. I agree with Bennett in the opinion that the spark treatments should be avoided if possible, for they are usually very disagreeable and rarely accomplish much more than the breeze or spray modalities. The Morton wave is one of the most useful currents of the static type and can usually be administered without disturbing the patient very much. somnia and restlessness of the neurasthenics is much benefited by the use of positive insulation while the headache and pains of these patients are readily controlled by the use of the breeze or spray. The Morton wave has a very wide field of application and is highly recommended to control faulty metabolism. My own experience leads me to believe that the majority of headaches will yield readily to the positive head breeze. In a general way I would say that the static currents are well worthy of a trial in many painful and diseased conditions and especially in cases marked by faulty metabolism, diminished elimination and lack of nerve tone.

If a static machine is generating all right the more it is left alone the better. I have two and have had but little trouble with them. The outsides of the machines are cleaned carefully every day, but I never open the case excepting I find it necessary to oil the bearings, readjust the

^{*}Read at the meeting of the Western Electro-Therapeutic Association, held in Kansas City, May 27, 28, 1920.

combs, replenish the drier or examine the belt, and these occasions are very infrequent.

To keep the machines dry I use chemically pure sulphuric acid placed in a glass dish. It is necessary to have the dish containing the acid in a larger one for the acid takes up so much moisture that it would soon run over on to the floor of the machine.

It is well with nervous cases to administer an insulation treatment first in order that they may become thoroughly acquainted with the machine and lose all fear of it before receiving a breeze or Morton wave current. Most of the patients who come to me have confidence in electricity as a therapeutic agent, but are afraid of it, having formed their ideas from some early experience with a galvanic or faradic machine. My first effort is to get their confidence. For this reason I always try out the polarity of the machine before I take them in the room so that they may not see the sparking between the prime conductors which may create the feeling that the current is very powerful and may shock them badly.

One useful thing I think I have discovered, although it may be generally known. However, I have never seen it mentioned in any book or heard it advocated in any lecture or paper. That is that a static machine which fails to generate can be readily charged by a high frequency current applied to the prime conductors from the metal end of the insulated handles for holding vacuum tubes. A small portable high frequency machine is all that is necessary for this purpose.

EXOPHTHALMIC GOITRE*

H. W. NYE, M. D., Osborne, Kas.

Instead of making a report on the physiological action of the high frequency currents and the new apparatus that have come out this year, of which there is none of any importance, I thought I would report a case of exophthalmic goitre, or Graves' disease. Patient, a woman, 32 years old, married, one child, was under observation for more than two years and during that time, I gave her about everything in the nature of medicine that had ever been recommended for goitre, but she gradually grew worse, and all the time refusing operation. In March, 1919, I gave her four diathermia treatments and she got decidedly worse, so I discontinued them. On April 15th she got so bad she consented to go to the hospital for an operation. She was put to bed. I gave her quinine-hydrobromide and ergotine. Her pulse was 140 to 160; very nervous, exophthalmos, severe headaches, mental excitement, sugar in urine, sometimes melancholia. By May 15th her pulse was down to 120 to 140, but other symptoms had not improved. She was seen by one of the best surgeons of Kansas City, who refused to remove the thyroid, saying it would be fatal to do so. He did, howevery, remove the tonsils and ligate, bother anterior thyroid arteries. Her pulse remained 120-160 until June 18th, more than a month from the time of litigation of the arteries, and she was again seen by the surgeon who again refused to operate, but advised injections of boiling water into the gland. This was done and three days later she left the hospital to stay with her sister in town. Her condition did not improve, and after waiting for two weeks, I wrote Dr. Grover and he suggested cross fire x-ray or high frequency over cervical region and percussion of the seventh cervical. As suggested by Abraam's, his theory being "that the disease is an angioparalytic affliction and that stimulations of the vaso-motor center in the cord by concussion of the spinal process of the seventh cervical, is helpful.

We know that the high frequency currents applied to the spine will elicit viscera reflexes, and I reasoned that both methods would be helpful. I had her come to the office, to give her these treatments and she had to climb a long flight of stairs, pulse was 130-160, feet and ankles swollen, menses had stopped, had intense headaches, and at times diarrhea, and several times we found sugar in the urine. This was in July. I gave her both the high frequency over cervical region and percussed the seventh cervical. I had a nurse take her pulse and she said, while it did not slow materially it did become fuller and more regular. I also put her on Harrowers' capsules of pancreatin compound. There was a slight improvement from the start, but it was slow all along. I continued these treatments until September 24th and she gradually got better; menses returned; pulse down to 80-90, and now she says that she is well and in addition to doing her own housework, is helping farm by plowing with a Ford tractor.

There have been so many things used on this case that it may seem difficult to say what was the curative factor, but she got worse under every form, until we put her on Harrowers' capsules and the high frequency currents, and while she was taking these, she walked two blocks and climbed a long flight of stairs for her treatments, which certainly was not conducive to a cure. Sa Jous says in "Encyclopedia of Medicine" that practically every case of Graves' disease can be cured without even a partial removal of the gland and certainly this case has been greatly improved after she had been refused operation, and after all, I consider the treatment

^{*}Read at the meeting of the Western Electro-Therapeutic Association, held in Kansas City, May 27, 28, 1920.

of exophthalmic goitre as one of the most difficult problems.

These patients are often too sick to be treated by surgical removal. Furthermore even if they are operated on, they do not always get better right away, as we who have them to take care of know. If they are not operated on, by removal of the gland or part of it, some one of the preliminary operations may be done, such as ligation of the thyroid arteries, or injection of boiling water into the gland substance. These, as in my own case are also not very successful. The statistics of the Mayo clinic and of other clinics where medical treatment is used show that the results of medical treatment are very favorable compared with surgical treatment.

The methods of medical treatment that we

have at our disposal are:

First-Rest, and increased feeding, to counteract the loss of energy wasted by the absorption of toxic material. All the symptoms of the disease point towards the desirability of this. We have loss of weight and strength, the sense of heat due to increased metabolism. We have the constant muscular twitchings and tremblings. We have diarrhea. All these must be counteracted by keeping the patient quiet, and by adding to the amount of food taken in.

Second—Symptomatic treatment by bromides, such as the hydro-bromide of quinine (recommended by Forscheimer) given in from two to five grain doses three times a day. Arsenic has also been recommended.

Third—Specific treatment intended to neutralize the toxine or act directly on the cells of the gland. The preparations which have been recommended are:

- 1. Beebe's serum.
- 2. Thyroidectin, the blood of thyroidectomized sheep.
- 3. Moebius antithyroididin which is the serum of thyroidectomized goats.
 - 4. The milk of thyroidectomized goats.
- 5. Various forms of iodin, on the theory that exophthalmic goitre is due to iodin impoverishment of the food.

Nearly all of these methods of treatment have fallen into more or less disrepute.

Fourth—The use of extracts of other ductless glands. The theory upon which these are used is the inter-relationship which exists between the various ductless glands. We see this in some of the symptoms of my patient, such as the amenorrhea showing a lack of ovarian secretion. Then the nervous irritability and asthenia indicates administration in some cases of adrenal extract. The presence of sugar in the urine in many cases indicates the absence of pancreatin. Various combinations of these extracts are necessary as the different cares show need for same.

Fifth—The use of electro-therapy. This is probably the field of the greatest development in the future. Holmes and Merrill (J. A. M. A., vol. 73, No. 22, p. 1693) have reported on the exposure of the gland to x-ray, on nearly 150 patients. They report excellent results.

Eberhardt (High Frequency Manual, Chicago, 1916) recommends the high frequency current in a vacuum tube, using an intensity capable of producing a half to three-quarter such spark. Mechanical vibrations to the dorsal vertebrae is also used. Auto-condensation 2500 E is also

used.

MEDIASTINAL AFFECTIONS—RADIO-LOGICAL DIAGNOSIS*

ARTHUR C. CLASEN, M. D., Kansas City, Mo.

Mediastinal affections until the development of the x-ray played a minor role in clinical medicine. It is to this invaluable discovery that we

are so greatly indebted.

The mediastinum is that space in the median portion of the chest lying between the two pleura. It extends from the sternum anteriorly to the vertebral column posteriorly, and contains all the thoracic viscera except the lungs. Anatomically the mediastinum is divided into a superior portion-all that part above the heart and vessels—and an inferior portion or that part below the upper border of the pericardium. The inferior mediastinum is subdivided into an anterior portion containing a few mediastinal glands and the thymus or its remains, a middle or interpleural space containing the heart with its vessels, phrenic nerve, glands, hilus and trachea with its two bronchi. The third or posterior portion contains the descending aorta, thoracic duct, vagus and sympathetic nerves, lymph nodes and oesephagus.

It is due to this anatomical relationship that mediastinal affections manifect themselves. The chief canifestation being pressure symptoms and signs.

Considering the anterior mediastinum, the thymus, in order of frequency, assumes first place. Clinically a persistent thymus is oft easily recognized but radiologically it is difficult to obtain on account of its less dense structure lying directly behind the more dense bony structure the sternum. It is only when the thymus is markedly enlarged that we get a definite shadow. If large enough the lobes of the lungs may be displaced so that it overlaps the heart. In this case we obtain a supracardiac shadow merging with the heart shadow.

Next in importance is substernal or intrathoracic thyroid. This condition quite often is

^{*}Read at the meeting of the Western Electro-Thera-peutic Association, held in Kansas City, May 27, 28, 1920.

diagnosed by subjective and objective signs and symptoms. By inspection one sees a suprasternal swelling which also can be ascertained by palpation. Infrequently there is bulging of the thoracic wall. The symptoms presented are those due to pressure on the trachea, bronchi or recurrent laryngeal as it passes up between the trachea and esophagus, causing alterations in the voice and inspiratory and expiratory dyspnoea.

We next consider the intrathoracic Hodg-kin's disease which until recently was not radio-logically diagnosed. Wessler and Green of Mt. Sinai Hospital recently reported several cases of Hodgkin's diagnose from chest plates. Clinically the typical or marked cases are recognized at once, but it is difficult to make a positive diagnosis when the external lymphomas are poorly developed so that microscopically they present nothing very definite. Wessler found in twenty-five cases of Hodgkin's that there was definite intrathoracic lymph gland enlargement in a large percentage of cases.

In the mediastinal type large shadows extend outward from the mediastinum and invade the lung structure. The shadows oft are lobulated and well circumscribed. The differential point here is that other new growths or tumor masses can usually be studied under the fluoroscope. The oblique position gives one the relationship existing in the posterior mediastinum, i. e., relationship to the trachea and esophagus. Tumors lying in close proximity to the heart under the fluoroscope may show a pseudo pulsation. Thus one must be guided against pronouncing such masses aneurysms. Another thing worthy of note is that neoplasms of the ribs and spine may give definite shadows resembling intrathoracic pathology. The symptoms are those of pressure plus those of generalized adenopathy as malaise, anemia, anorexia, splenomegalyetc.

Warthinn, of Ann Arbor, reports a case of polycythemia or vaquez disease which resembled Hodgkin's very much, but which easily can be differentiated from Hodgkin's by the blood examination.

Among the interesting cases are those that possess enlarged mediastinal glands. The clinical picture is one of persistent, spasmodic and paroyxsmal cough with definite expiratory dyspnoea. These patients usually complain of asthma—non-seasonal but climatic—for the condition is aggravated by cool damp weather. The glands are quite large and give a widened area of mediastinal dullness on percussion. X-ray negative shows a bilateral and feathery shadow more pronounced at the hilus.

Mediastinal new growths which includes the various hymphomata, Hodgkin's, sarcoma, and carcinoma are by no means rare. Malignant

tumors are more common than benign. Among the important benign neoplasms are found chondromata and cysts. Hyatid and dermoid cysts are the ones found in the thorax. The dermoid which is quite rare is of mediastinal origin. These tumors radiographically are diagnosed by their well circumscribed form and absence of pulsation. Other tumors are less regular and multiple. Dermoids are of slow growth and generally appear during the second decade of life. They may contain teeth, bone, or cartilage which may show up under the ray. Matastatic lymphosarcoma, carcinoma and sarcoma are quite frequent, whereas primary malignancy is rare. Recognition of malignancy depends upon physical, radiological, laryngeal and esophageal examination. The differentiation of the primary from the secondary tumor is made by an exhaustive physical examination, Wassermann and T. B. C. fixation aid in differential diagnosis of tumors from syphilis, T. B. or aneurysm.

Mediastinal sarcoma arises in the lymph glandular elements as the thymus and lymph glands. The chondro and osteosarcoma are exceptional. The neoplasm begins in the gland and extends along the lymphatics. It is well defined until it breaks through the capsule when it assumes an irregular outline. The lung and invariably the bronchi and trachea may be invaded by extenstion from the glands. When the latter occurs there oft is found hemorrhagic pleural effusion. Infrequently mediastinal sarcoma are diagnosed as T. B., aneurysm or chronic emphysema.

Carcinoma of the lung or mediastinum is rather difficult to diagnose clinically. It is here that radioscopic examination is essential. It may resemble miliary tuberculosis or appear as single variable masses possessing a definite outline. If it involves the hilus we may obtain a dense shadow extending outward from the mediastinum. Here the shadow is confluent with the heart and aortic shadow and may be well circumscribed, lobulated or presenting a hazy contour.

The most common mediastinal tumors are aneurysms. These are recognized both clinically and fluoroscopically. As a rule they are pulsating masses of even contour. Ascending aneurysms generally cast a shadow to right of spine, whereas those of the arch usually appear quite high in the mediastinum. Aneurysmal shadows are usually more dense and more clearly defined than neoplasms. Cardiac displacement as produced by mediastinal adhesions in T. B. or scliosis must be considered when studying thoracic shadows.

The symptoms generally presented are those of discomfort in the chest, cough, dysphagia, later dyspnoea, cyanosis, and dilatation of veins of face and chest.

One of the common conditions found in the trachea and esophagus is the presence of foreign bodies. It is quite essential to localize the foreign body by proper examination. Since the right bronchus is wider than the left and also in more direct line with the trachea small objects tend to select it. If the foreign body is very large it may find enlodgement in the esophagus. Here under proper lubrication it usually passes through without any difficulty.

In Pott's disease we often find a well circumscribed shadow which appears intrathoracic. In this condition we depend upon the clinical findings which are evidence of T. B. in some other part of the body. The patient generally complains of some pain not directly referable to the thoracic spine. The plate shows a dense shadow superimposed upon the spine. The physical signs as the gait, the rigid spine with the kyphosis and the accompanying pain all aid in the diagnosis.

Another pathological vertebral condition more common than suspected is the presence of cervical or accessory ribs. These are more commonly found in conjunction with sixth and seventh cervicals. Nearly all are bilateral which may or may not produce symptoms, and which generally occur with other skeletal abnormalities. The rib may exist only as a node which does not extend beyond the transverse process or it may articulate with the first rib or attach itself to the sternum.

The symptoms usually produced are neuralgic pains in neck radiating down the arms and into the thorax. The sensory changes are in the nature of anesthesias or parasthesias especially in ulnar part of hand and fingers. Patient often complains of nervous disturbances in one or both arms, pricking sensation or weakness, which may progress to complete disuse of the limb which usually does not respond to hydro or electro-therapy.

Cook Pork Well—The approach of the Christmas season prompts the United States Department of Agriculture to issue a warning against eating pork or any product containing pork unless it is well cooked. At that season, especially, quantities of certain kinds of pork products which many persons are accustomed to eat uncooked are prepared in homes and on farms, as well as commercially. Uncooked pork frequently contains parasites of microscopic size known as trichinae, and persons who eat uncooked pork run the risk of contracting trichinosis, a most painful and distressing disease which sometimes ends fatally in spite of any treatment. The health of patients who recover from the acute stages of the disease is often permanently impaired.



Next White House Physician a Homeopath— "Inasmuch as President-elect Harding employs a homeopathic physician, it is assumed, with rejoicing, by members of that school, that the next White House physician will be a disciple of Hahnemann, instead of a rear admiral," says the Medical Record.

Meltzer-Lyon Meth in Diagnosis of Infections of Biliary Tract—George E. Brown, Miles City. Mont. (Journal A. M. A., Nov. 20, 1920), has found the direct examination of aspirated bile, by means of the Meltzer-Lyon method, of great value in the diagnosis of early cholecystitis. The fresh bile shows definite evidence of infection. Cultures are usually positive. The value of the bile examination grows less as the cholecystitis becomes more chronic. In the later lesions, the bile may present a normal appearance. Cultures are usually negative.

Functional Scoliosis in College Men—It is stated by William Lawrence Estes, Jr., Bethlehem, Pa. (Journal A. M. A., Nov. 20, 1920), that functional scoliosis has been shown to occur in from 10 to 20 per cent of the men of college age, the left sided curve predominating (70 per cent). This scoliosis results chiefly from flatfoot, occupational or developmental peculiarities, and from shortening one lower extremity. This shortening may exist in Bryant's line, or in a trochanter to external malleolus measurement. A mild coxa vara, and variation in length of the femoral, and sometimes the tibial, shaft have been suggested as the most likely explanation of the shortening.

Silence May Be Golden—Dr. Charles R. Hancock of the Hotel Pennsylvania wants his wife, Dr. Eugenia Hancock of the Hotel Le Marquis, to quit talking about him and his practice, so he appeared before the supreme court and asked for an injunction to restrain her from talking so much. Dr. Hancock declared that he had tried everything else under the sun. In addition Dr. Hancock asked that their marriage be annulled because of alleged misrepresentation. Dr. Hancock says his wife told him that she was 30 years old when she was married to him in 1909. She told him also, he said, that she had divorced her former husband in Montana and that she had a young child then in the West. Dr. Hancock said that he was entirely overcome when the child came East to visit and turned out to be a grown man, bald headed! An anxious people (male) will await the action of the supreme court, as to the remedy applied in this case.

Continuing "The Medical Fortnightly and Laboratory News."

The Medical Herald

and Electro-Therapist

Incorporating the

Kansas City Medical Index-Lancet

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DECEMBER 15, 1920

No. 12



To All Our Readers:

A merrie Christmas and a prosperous new year! Keep in mind the words of Charles Dickens, "I will honor Christmas in my heart, and try to keep it all the year."

Trachoma

The "furor operativa" has entered into the field of trachoma or supposed trachoma. Unfortunately there seems to be a great difficulty in diagnosis of this disease among the experts or ophthalmologists. Many of us see few cases of trachoma among school children, but we see a great many cases of folliculosis among them.

In speaking of the diagnosis, Dr. John Mc-Mullen of the U. S. Public Health service, says: "Like smallpox and some other communicable diseases of which the etiology is unknown, the diagnosis is a matter of personal opinion, based on the character and the amount of experience which the observer may have enjoyed with respect to the disease." He recites one instance in a western state, where sixty drafted men were examined and 25 per cent of them were rejected as having trachoma. "I examined these men and found them quite free from trachoma."

Follicular conjunctivitis and trachoma are at times difficult or impossible to differentiate. If not, they are suspicious. Dr. McMullen says the treatment is surgical and by grattage, the operation done by the public health service operators. Now grattage is not done in folliculosis without doing unnecessary harm, and it should be limited to trachoma. Health officers and ophthalmologists frequently divide on the diagnosis of trachoma, as men do in regard to the diagnosis of many other diseases.

True trachoma is never cured in a short time. This point is emphasized by Edward Jackson and Theobold, quoted by T. W. Moore, by Allport, W. T. Lister, and a host of other well known observers, while Ray quotes Axenfeld as questioning whether trachoma is ever cured in the true sense of the term—a feeling probably shared by most ophthalmologists.

The phrase, "Any eye disease accompanied by purulent discharge" should be used as a basis for quarantine.

Dr. Hiram Woods thinks that the large percentage of quick cures after grattage is very suggestive of a large number of errors in diagnosis of trachoma. Conjunctional folliculosis, strictly speaking, is not a disease entity. It is a symptom, pure and simple, an expression of various causative factors, and of the lymphatic temperament. Trachoma is a syndrome, complete in itself, due to a single specific cause—a disease entity. Folliculosis or follicular catarrh, may be regarded as an obstinate form of conjunctivitis, with the occurrence of "follicles." These follicles consist of masses of adenoid tissue in which respect the pathology resembles that of trachoma. They disappear after a time, leaving the conjunctiva in a natural condition. In trachoma, however, there are permanent changes in the conjunctiva, hypertrophy of the conjunctiva, the formation of "granules" with subsequent cicatricial changes. There is more or less secretion which is contagious; it is an important affection on account of its disastrous complications and sequelae, which may lead to partial or total blindness.

The health officer of a state where trachoma is present, says: "Trachoma presents a problem more largely economic than any other in the whole field of preventive medicine. No one dies with this disease. Many of those who have it are eventually made blind. The economic usefulness of every patient is greatly decreased. It would be conservative to say that the average earning capacity of persons having trachoma is less than one-fourth of the average earning capacity of well individuals. It is slowly but surely contagious and spreads through families, schools, institutions and communities when an initial case is introduced."

We believe that the cases which are dealt with surgically should be really trachoma. We object to the substitution of cicatricial tissue and adhesions for normal conjunctiva, and in follicular conditions a milder treatment will serve all purposes.

P. I. I..

Buchanan County Medical Society

The annual dues have been raised to \$10 per year.

The annual dinner will be served at the Hotel Robidoux Dec. 29th, in the evening. The feature of the occasion will be a symposium upon Gastric Ulcer. Etiology, by W. H. Carle; Pathology, by C. A. Good; X-Ray Findings, by A. B. McGlothlan; Medical Treatment, by J. M. Bell; Surgical Treatment, by W. T. Elam.

Surgical Treatment, by W. T. Elam.

At the meeting held Dec. 1st officers for the year 1921 were elected as follows: President, H. S. Conrad; 1st vice-president, F. H. Ladd; 2nd vice-president, E. S. Ballard; secretary, O. C. Gebhart; treasurer, J. M. Bell; censor, A. B. McGlothlan; delegate, J. I. Byrne; alternate, C. R. Woodson.

J. M. B.

The "Southwest" and "Missouri Valley" to Meet in Kansas City

At the recent meeting of the Medical Association of the Southwest, held in Wichita, Kansas City was selected as the next place of meeting, and the invitation from this city, and of the "Missouri Valley," to hold a "joint" meeting was unanimously accepted. The date suggested was October 4, 5 and 6, 1921. A meeting of the officers of both associations will be held shortly after the new year, to formulate plans for the joint meeting. Officers for the "Southwest" were elected as follows: President, Dr. E. H. Skinner, Kansas City, Mo.; vice-president, Dr. W. W. Rucks, Oklahoma City, Okla.; vice-president, Dr. J. T. Axtell, Newton, Kans.; vice-president, Dr. H. Moulton, Fort Smith, Ark.; vice-president, Dr. R. H. Needham, Fort Worth, Tex.; secretary-treasurer, Dr. Fred H. Clark, Oklahoma City.

Western Electro-Therapeutic Association

The week of April 18-23 has been selected for the annual meeting of this association, a few weeks earlier than last year, in order that the dates should not conflict with those of the various state associations. President Grover has appointed the following committees, and the chairman of each is urged to go to work immediately, getting in touch with the other members on their respective committees:

COMMITTEES

- On Direct Continuous Currents and Apparatus: Dr. C. F. Harrar, chairman; Dr. E. E. Shaw, Dr. Frank J. Iuen, Dr. R. Willman.
- On High Frequency Currents and Apparatus: Dr. H. W. Nye, chairman; Dr. W. P. Patterson, Dr. W. P. Grimes, Dr. C. F. Gardiner.
- On Static and Sinusoidal Currents and Apparatus: Dr. Jas. Y. Simpson, chairman; Dr. C. F. Harrar, Dr. E. E. Shaw.
- On Phototherapy:
 - Dr. Chas. Keown, chairman; Dr. D. T. Quigley.
- On Roentgenology and Radium:
 - Dr. J. D. Gibson, chairman; Dr. D. T. Quigley, Dr. Frank H. Blackman.
- On Vibration and Physical Therapy:
 - Dr. Theo. F. Clark, chairman; Dr. D. Richardson, Dr. Dora Greene Wilson.
- On Hydrotherapy:
- Dr. Curran Pope, chairman; Dr. Chas. J. Cahill.
- On Scientific Research:
 - Dr. S. Grover Burnett, chairman; Dr. Curran Pope, Dr. J. D. Gibson.
- On Arrangements and Exhibits:
 - Dr. Chas. Wood Fassett, chairman; Dr. S. Grover Burnett.

Morbidity Reporting System Becomes Effective in Missouri

Under the new public health statute which recently become effective in Missouri, the State Board of Health has proceeded to organize a modern State Health Department. The general organization is similar to that proven successful in other states with such modifications as are necessary to meet present local conditions and awaiting adequate appropriations for health purposes, both state and local.

No health department, state or local, can effectively prevent or control diseases without knowledge of when, where and under what conditions cases are occurring.

Regulations as provided for by the statute are promulgated, establishing the reportable diseases and the method of reporting. In these cases the attending physician is responsible for reports. Failure to do so is made a misdemeanor by law. The law requires each county court to appoint a health officer, who becomes a deputy state commissioner of health for that county. He has jurisdiction over the entire county and it is his duty to enforce therein the state regulations which are general, meeting the minimum requirements for public health control and which supersede all local ordinances, rules and regulations.

Upon the passage of the new statute and standardization of the department which makes possible full cooperation with the United States Public Health Service, the secretary of the State Board of Health is commissioned a collaborating epidemiologist, and the deputy state commissioners of health for the counties are commissioned assistant collaborating epidemiologists of the United States Public Health Service. By this in return for systematic weekly morbidity reports

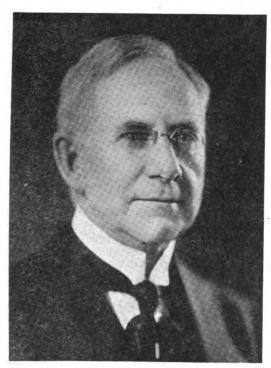
to that service, the government is extending valuable assistance for collection, which will save the state large expenditures.

Post cards for reporting addressd for return to the health officers are being distributed to the physicians of the state. The reporting provisions will be permanently enforced beginning Saturday, December 11th, and the State Board of Health urgently requests the full cooperation of all to whom the requirements apply.

The reportable diseases are as follows: Anthrax, chicken pox, diphtheria, epidemic or septic sore throat, glanders, influenza, leprosy, measles, meningitis cerebro-spinal epidemic, mumps, ophthalmia, neonatorum, plague, poliomyelitis, acute anterior, rabies, scarlet fever, smallpox, tetanus, trachoma, tuberculosis, typhoid fever, typhus fever, whooping cough, chancroid, gonorrhea, syphilis.

Men of the Missouri Valley

The subject of our sketch was born at Coteau Landing, Quebec, April 30th, 1856. In early age



WILLSON ORTON BRIDGES, M. D. President Medical Society of the Missouri Valley.

he moved to Ogdensburg, New York, where he received his academic education in the Ogdensburg Academy. Was graduated in medicine from the University of New York in 1879. Assumed general practice in Ogdensburg where he was

city health officer, and later returned to New York for post-graduate work.

In 1883 he moved to Omaha, where he has been actively engaged in the practice of internal medicine since that time. He became associated with the Omaha Medical College in 1888, serving in the capacity of professor of internal medicine in 1891, retaining this chair when the college merged with the University of Nebraska, and held the same up to the present year, when he was made professor emeritus. He was secretary of the college from 1891 to 1898, and dean of the College of Medicine, University of Nebraska, from 1913 to 1917.

Dr. Bridges was president of the Douglas County Medical Society in 1894, and president of the Nebraska State Society from May, 1897 to May, 1898. At one time he was physician to St. Joseph's Hospital, and is now chief of medicine at the Nebraska Methodist Hospital and consultant to the Clarkson, and Swedish Immanuel Hospitals of Omaha.

Dr. Bridges is a charter member of the Medical Society of the Missouri Valley, and no one is held in higher esteem among its fellows. Modest and unassuming, generous, painstaking and possessing rare ability, Dr. Bridges has reached an enviable position among the foremost diagnosticians of the west. His heart has always been in his service, and success to a superlative degree has crowned his life's work. The election of Dr. Bridges to the presidency of the society came as a complete surprise to him; at the time of the meeting he was on the Atlantic, returning from a trip to Europe.

This May Refer to You! This is the month in which you should renew your subscription. The Herald will cost \$2.00 a year, beginning January 1st. But you may subscribe for as many years as you wish at the \$1.00 rate providing you do it before December 31, 1920. "Verbum Sap."

Sanitary Reception Room Furniture-Everything about the average physician's consultation and operating rooms suggests the strictest attention to sanitation, but the same care doesn't seem to be exercised in the furnishing of the reception or waiting rooms. It is not uncommon to see furniture in the reception room upholstered in velour, tapestry, plush and other materials calculated to harbor germs. Plain wood or enameled metal are good materials for waiting room furniture. If it is desired to make the waiting patients more comfortable by providing upholstered furniture, the upholstery material should be the pyroxylin coated leather substitute type, which is waterproof and therefore not injured by frequent washing with soap and water.



A Word to the Roentgen Therapist

(This paper appeared in The American Journal of Roentgenology, July 1920, by C. Augustus Simpson, Washington, D. C.)

I hope that those who have been and are using the roentgen rays for the treatment of hyperthyroidism are alive to the recent literature on the metabolic studies in this disease.

We have waited for years for a test that should show the actual improvement or lack of improvement in patients with Graves' disease following surgical and x-ray treatment. We have it now in the metabolism tests which have been perfected and popularized by pathologists and internists.

These tests show what I have been writing for the past six years, namely, that massive measured doses of x-rays over the thyroid and thymus glands at three week intervals will cure 90 per cent of the cases of hyperthyroidism and in the very great majority of instances render an operation unnecessary.

At last we have been able to demonstrate three things to which every roentgen therapist should be thoroughly alive and of which they should take immediate advantage:

1. That animal experiments show the x-ray will completely atrophy the thyroid as well as the thymus gland.

2. That raying of the thyroid gland does not complicate a future operation, but on the contrary serves to lessen the danger and risk to the patient.

3. That according to the metabolism tests carried out at the Massachusetts General Hospital, and other medical centers, the x-ray offers a very much better and decidedly less dangerous method of treating hyperthyroidism than surgery.

In comparing the two methods of treatment, not only was the raying without the danger of an operation and the results years later quite as good, but the patients who were treated by the roentgen ray to begin with were 27 per cent more toxic or dangerous than those operated on.

These results to my mind are a distinct victory and achievement for the x-rays, and obtained as they were by disinterested pathologists and internists, should show the profession at large what splendid results the roentgen ray will give in Graves' disease. In a series of over four hundred cases, extending over a period of six years. I have had some failures, but also I have many who have been operated on, some as often

as three times, with a return of the tumor and of all the symptoms.

I am quite sure the time will soon arrive when surgery will be considered only in the small percentage of cases of hyperthyroidism which fail to respond to the roentgen ray. As a matter of fact, a failure from x-ray will most often prognosticate an operative failure.

I can truthfully say that a physician makes a grave and deplorable mistake if he allows his patient to be operated on before getting massive doses of x-ray over the thyroid and thymus glands.

Give the patient an honest opinion as to the relative value of the roentgen ray and surgery, and that patient will invariably select the x-ray. Once they have had the x-rays properly administered, there will be very few instances where there is any need for an operation.

Now it is for every roentgen therapist to take an active interest in this splendid advance in therapy, improve his technic, and see that patients are not exposed to a dangerous and disfiguring operation, when he has means at hand to prevent it.

I am satisfied that the three contradictory papers read in four years by a young roentgen therapist representing a great medical school and hospital, each paper and discussion expressing diametrically opposite views to its prior article on the above subject, must have been due to the influence of a surgical department over the x-ray department of his institution. At least I shall be charitable and say that he meant well.

In conclusion let me say that if the roentgen therapist studies his patients, and carries out his technique accurately, he will not only obtain splendid results but he will actually save many lives and gain the undying thanks of scores of patients.

Radium in Treatment of Malignant Tumors of Nose and Throat—In the opinion of Robert Sonnenschien, Chicago (Journal A. M. A., Sept. 25, 1920), the future of radium therapy seems very bright, particularly in reference to applications in tumors of the nose and throat; but great caution is advisable in statements regarding actual cures. It is important to watch for recurrences during a period of from two to five years. In reporting cases, authors should give details of the preparation used, the method of application. duration of exposure, etc., in radium treatments. Following up the cases and reporting on them again whenever possible is of the utmost importance in the formulation of definite conclusions regarding the results of radium treatment. Radium is probably of great value before, and certainly after operations. It is very efficient in relieving pain, hemorrhage, discharge, etc., in

many inoperable cases. Sarcomas are especially responsive to radiation; the carcinomas yield much less readily, and the squamous type of epithelioma is scarcely amenable to radium at all. Complications, at least those reported, are not so frequent as one would be likely to expect. Burns were the most common ones, but even death may result from toxemia. Radium has many advantages as compared with roentgen rays, especially for application in the nose and throat. The diagnosis of the malignant cases should be made by a competent laryngologist, and the radium applied either by him or in cooperation with a radiologist. Only in this way will correct statistics and reliable results be obtained, with greatest benefit to the patient and the safest guidance to the profession.

Radioscopy and Radiography of the Spleen-The present means at our disposal for the clinical exploration of the spleen are susceptible of furnishing excellent data, but they are not to be implicitly relied on in each case, because they expose the clinician—as do all methods of exploration—to much uncertainty and to many mistakes. The radiological study of the spleen furnishes another diagnostic element that must not be neglected in practice. It completes the clinical examination of this organ and facilitates the recognition of affections involving it, and therefore procures the means of making a precise diagnosis; that is to say, the differentiation of affections seated in those viscera in proximity to the spleen. Clinically, the spleen in the normal state may be percussed but it is inaccessible to palpation, hidden as it is under the diaphragm and protected by the thoracic walls. The data this furnishes are consequently incomplete. Radiographically, the capacity of the spleen stands out somewhat against the transparency of the overlying structures, but without technical contrivances it shades off on the radiograms and becomes mingled with the shadows of the adjacent organs. Gas distention of the stomach, as well as of the colon if necessary, reveals a light area on the plate showing the situation of the organ and by contrast the situation and size of the spleen, which gives a dark area on the plate. In some cases the gas distention need not be artificially produced because it is naturally present and is distinctly manifest in children, as well as in adult aerophage individnals. The exact shadow of the stomach showing its situation and displacements may also be obtained by radiography and radioscopy after a bismuth meal. Radioscopy of the spleen should be done successively in profile, from the back, and in the intermediary oblique positions in order to see the organ on the screen in all its ncidences. Orthodiagrams can thus be taken it the same time which will allow the surgeon

to formulate an opinion. Radiography afterwards will fix the shadows seen upon the screen. It should be done with the subject in the upright position, seated and recumbent, but it must be done with a powerful apparatus because to give good results the exposure must be very short. In these circumstances only will a sufficiently distinct shadow be seen upon the plate because otherwise the physiological movements of the diaphragn would destroy the clearness of the shadow. These means of investigation with Roentgen rays will allow one to observe de visu the changes in position, size, and shape of the spleen as well as its mobility or fixity. It likewise reveals its relationship to other organs that surround it, and when in a pathological state to recognize exactly if the spleen or neighboring viscera are the seat of the morbid process of which the patient complains. Briefly, for the clinician these methods represent a marvellous auxiliary which should invariably be consulted. as it will certainly complete the clinical examination when it does not do more.—Medical Record.

Protein Sensitization in Eczema of Adults-It seems difficult to draw definite conclusions at present regarding the true value of the protein skin tests in eczema of adults. Most of the published reports have dealt with eczema of infants or children. In their work (similar to that of Ramirez) Howard Fox and J. Edgar Fisher, New York (Journal A. M. A., Oct. 2, 1920), have tested each patient by the cutaneous method with a goodly number of the ordinary commercial proteins. The results of these different methods have varied greatly, and they believe that a good deal of investigation remains to be done to determine the real value of the tests. It would appear, however, that they will ultimately prove to be of therapeutic assistance in a small proportion of cases of eczema of adults.

Adrenalin by the Mouth or Rectum—To obviate the necessity of giving adrenalin hypodermically the oral and rectal methods have been tried. Lesne says that adrenalin is not destroyed by pepsin nor pancreatin but that the liver seems to deprive it of some of its toxity so that it has to be given in large doses to obtain effects. Adrenalin is much more toxic when given by the rectum and Lesne infers that the abundance of the anastomoses of the hemorrhoidal veins enables the adrenalin to be carried directly to the vena cava. For this reason it seems preferable to give adrenalin by the recti, rather than by mouth because it gives results with smaller doses.—Soc. Med. des Hopitaux de Paris, June 11. 1920.

Milk diet exclusive is a prophylactic of scarlet fever; hence children at the breast rarely take the infection.



Ring out the old, ring in the new!

Merry Christmas and Happy New Year!

The osteopath's patients get well in self-defense.

The doctor's best friend: Vis medicatrix naturae.

There is an urologist by the name of Satani. He has the right specialty.

Bill Nye spoke of having a "dull maroon" taste in his mouth on the morning after the night before.

The treatment of cancer used to lie wholly within the surgeon's province before the days of radium.

Syphilis unrecognized and untreated, leads to unnecessary and sometimes dangerous operative work.

Dietetics is the most inexact of sciences, if we may judge by the dectrines promulgated by the professors of it.

There is a tendency for outsiders to try to reorganize the medical profession. Is it the profession's fault?

Failure to recognize the gastric crisis of tabes has often lead to operations for appendicitis or gall bladder disease.—I. J. of S.

Dr. Lee reports 11 per cent of infections with iodin in all sutured wounds and 1½ per cent of infections in sutured wounds treated with dichloramine-T.

The appalling joke is on the Buchanan Co. Medical Society, for at its annual banquet on Dec. 29, 1920, after a good dinner, they will be regaled by a symposium on the etiology, pathology, x-ray examination, medical and surgical treatment of gastric ulcer.

Talk about the eternal fitness of things! But doctors will be doctors, and apparently can never relax and enjoy life, but will talk shop, shop, even at a banquet. Waiter, bring me a high ball and a big cigar.

Because of the diminishing thyroid gland when there is a reduction or a flabbiness of the subcutaneous adipose tissue acquired by the woman of lactating age which was noticed by Browning, thusly:

"From the chin to the udder,

She was a thing to make you shudder."

Do you tell your patients the truth?

Those who believe themselves eminently practical frequently base their actions on the most untenable of theories. Watch the doctor!

The odor of the breath will alone enable an expert to make the diagnosis of angina vincentic, the salvarsan treatment proves absolutely specific, it does not appear that the injection method is necessary, for the local application of the dry powder or 2 per cent glycerin solution answers the purpose. Neosalvarsan is not efficient.

In an article on the "Abolition of Medicine as a Private Enterprise," a writer in the Illinois Medical Journal says: "Let the medical rank and file list the 'We are its' who favor schemes inimical to the best interests of the profession at large and serve notice on them that 'referred work' has stopped—then watch the eminent consultants and operators climb trees."

In the annual report of the superintendent of the Chicago Juvenile Protective Association statistics are given which seem to show an increase of 238 per cent in cruelty to wives and children since the prohibition law went into effect, and a still more rapid increase during the last six months. The reaction of heavy drinkers has manifested itself in surliness and abuse of the family, according to the report.

P. I. L.

The idea of the sacredness of salt is very ancient. In the East its valuable preservative qualities made it seem an emblem of good faith and eternal friendship.

Free Radium Treatment for Cancer — Free radium treatment for sufferers from cancer will be administered, beginning October 15, by the New York State Institution for the Study of Malignant Diseases at Buffalo.

A Research Information Bureau—The National Research Council has established a research information service as a general clearing house and informational bureau for scientific and industrial research. This "service" on request supplies information concerning research problems, progress, laboratories, equipment, methods. publications, personnel, funds, etc. Ordinarily inquiries are answered without charge. this is impossible because of unusual difficulty in securing information, the inquirer is notified and supplied with an estimate of cost. Much of the information assembled by this bureau is published promptly in the "Bulletin" or the "Reprint and Circular Series" of the National Research Council, but the purpose is to maintain complete up to date files in the general office of the council. Requests for information should be addressed, Research Information Service, National Research Council, 1701 Massachusetts Avenue. Washington, D. C.



A TEXTBOOK OF HUMAN PHYSIOLOGY, INCLUDING A SECTION ON PHYSIOLOGIC APPARATUS—By Albert P. Brubaker, A. M., M. D., LL. D., professor of physiology and medical jurisprudence in the Jefferson Medical College; formerly professor of physiology in the Pennsylvania College of Dental Surgery; formerly lecturer on physiology and hygiene in the Drexel Institute of Art. Science and Industry. Sixth edition, revised and enlarged with 356 illustrations, 792 pages. Price, \$4.25. Published by P. Blakistons Son & Co., 1012 Walnut St., Philadelphia, Pa.

This is the sixth edition, up to date, for students and physicians. To the revised fifth edition is added here special additions and revisions relating to the "mechanisms by which changes in the arterial pressure are induced; to the mechanism of carbohydrate metabolism; and to the physiologic actions of the spinal cord and spinal nerves." The illustrations, especially those of the central nervous system, are splendid. The importance of the illustrated physiology of the central nervous system to diagnosis of disease is here enlightening. The spinal fluid differing in its origin and chemic composition as compared with the systemic lymph fluid is interesting. This book will revise the reader's ideas to date. S. G. B.

A MANUAL OF GYNECOLOGY—By John Cooke Hirst, M. D., Associate in Gynecology, University of Pennsylvania; Obstetricican and Gynecologist to the Philadelphia General Hospital. 12mo. of 466 pages with 175 illustrations. Philadelphia and London: W. B. Saunders Company, 1918. Cloth, \$2.50 net.

This book is presented with the sincere hope that it may give to the student a reasonably concise and accurate outline of the subject, and to the busy practitioner the information he may seek without the need of voluminous reading. The arrangement of the subject is that which has been followed by Dr. Hirst for 20 years. He gives the facts concisely, accurately, yet without harmful condensation. Some subjects, such as injuries due to childbirth are given from the standpoint of obstetrician and gynecologist, since the two views are so intimately associated. Unprofitable discussion has been omitted throughout the book. Special emphasis has been given to curettage because of its supposed minor character, the subject is dealt with three times in the work. The illustrations are particularly good, happily placed and very illuminative, so much so that the combination of text and cut enables one to follow in thought the doctor's happy and telling and convincing lecture hour.

THE HEALTH OFFICER—By Frank Overton, M. D., D. P. H., sanitary supervisor, N. Y. State Department of Health, and Willard J. Dennon, M. D., D. P. H., Medical Director of the Standard Oil Company. Octavo of 542 pages with 51 illustrations. Philadelphia and London: W. B. Saunders Company, 1919. Cloth, \$4.50 net.

This book contains the information which the average health officer needs in order to discharge his duties—what to do, how to do it and why. It gives the activities of the health officer, his relation to

NOTE—The Medical Herald's Kansas City office will supply any book reviewed in this department at publisher's price, prepaid. We can also supply any book by any publisher in the world. If an order for two books be sent at any one time, the purchaser will be entitled to a six months' subscription to the Herald. This plan is arranged for the convenience of our readers, and we trust it will stimulate trade in the direction of good books.—Editor.

boards of health, physicians, social agencies and the public; his qualifications and methods of work; the various diseases and insanitay conditions with which he deals, together with the scientific principles of preventive medicine. While it is designed for health officers, its simple language and untechnical form commends it to students, nurses, members of health boards, social workers, teachers and all those interested in public health work. It is the result of years experience in public health work in rural communities and in New York City. Its scope is so broad and all encompassing as to commend it even to the engineering fraternity.

J. M. B.

ELECTRIC IONIZATION—A practical introduction to its use in medicine and surgery, by A. R. Friel, M. A., M. D., F. R. C. S. I. Aural specialist, ministry, London district. Late professor for the throat, nose and ear, General Hospital, Johannesburg; late aural surgeon and bacteriologist No. 1 South African General Hospital, B. E. F., France. Wm. Wood & Company, New York, publishers. Price, \$2.00.

In a book of 76 pages the author has presented to the profession not only an introduction to the use of electric ionization, but a full exposition of its theory and practice. Volumes have been written on how to prevent infection, but in this volume the author tells us how to cure infection. In chapter I ions of different salts and their behavior under the influence of an electric current are considered. In chapter II an equipment for the employment of ionization is fully described. Chapter III is devoted to "Effects of Different Ions" and their application to various diseased conditions. Chapter IV gives the details of treatment which are to the point and may be easily grasped by anyone familiar with the direct continuous current in therapeutics. The author does not indulge in fanciful theories of electro-therapy, but gives in a practical manner the detailed technic of application of ions to many conditions. The book is void of unnecessary verbiage; it is "stripped for action" and is all adequate upon the subject of which B. B. G. it treats.

Forty Years Ago—"The medical association, representing a district composed of Lafayette, Clay, Ray, Cass and Jackson counties, held in Pythian hall here last night the first session of a periodical gathering of the organization, with Dr. Marsh of Liberty in the chair, and Dr. E. W. Schauffler as secretary. Some excellent papers were read. Drs. Marsh and Allen of Liberty, Sloan and Schauffler of Kansas City, Sebree of Higginsville and Hold of Richmond, were appointed a committee to memoralize the legislature in favor of a state board of health."—K. C. Times, Dec. 3, 1880.

A STATE OF SICKNESS

"Hello, old man, what have you got your throat wrapped up for?"

"Quinsy."

"Quincy, Mass.?"

"No. Quincy, Ill."—Boston Transcript.

THEY HAD IT

Towne—Do I understand you to say that Spender's case was really a faith cure?

Browne—Yes. You see the doctor and the druggist both truted him.

A little boy asked his mother if there were any men in heaven. Why, of course, said his mother, why do you ask? Well, I never saw any pictures of angels with whiskers. No. replied the mother, the men get in by a close shave.

"Flu," Pneumonia and DIONOL

So remarkable are Dionol results that the demand when these diseases are epidemic simply swamps us. This year we hope to be able to meet all requirements promptly. Here are some regular Dionol Case Reports (not occasional ones). If you want similar results use DIONOL.

Dr. A. H. R. reports: Your shipment of Dionol came in the nick of time. It brought down the temperature of that pneumonia case from 104 to normal in less than 24 hours. We have had a lot of pneumonia here this winter, and nearly every case in the hands of old time doctors and old time treatment, has gone to the undertaker.

Dr. G. F. L. reports: During the last few months we have had over 200 cases of pneumonia and "Flu" in which we used Dionol without the loss of a single life. Under this treatment pneumonia rarely goes to crisis, but terminates by lysis, without after complications.

Dr. R. L. S. reports: I have successfully handled 170 cases of "Flu" up to date and more coming daily, not one developing pneumonia. All cases received Dionol applications only. In all but one case, the cough loosened up in a few hours time, and was kept so easily thereafter. Six cases of pneumonia when first seen were also treated as above and cleared up quickly.

Dr. O. O. S. reports: During the recent "Flu" epidemic I used Dionol in over 100 cases with such gratifying results that I did not lose a case.

If Dionol is new to you, send for samples, literature and further clinical data.

THE DIONOL COMPANY

(Dept. 27)

DETROIT, MICH.



PRAYER

By Ella Wheeler Wilcox
I do not undertake to say
That literal answers come from heaven,
But I know this—that when I pray
A comfort, a support is given,
That helps me rise o'er earthly things
As larks soar upon airy wings.

I do not stop to reason out
The why and how, I do not care
Since I know this—that when I doubt
Life seems a darkness of despair,
The world a tomb; and when I trust,
Sweet blossoms spring up in the dust.

Since I know in the darkest hour,
If Ilift up my soul in prayer,
Some sympathetic Loving Power
Gives hope and comfort to me there.
Since balm is sent to ease my pain,
What need to argue or explain.

From our gross selves it helps us rise
To something which we yet may be,
And so I ask not to be wise,
If thus my faith is lost to me—
Faith that with angel's voice and touch
Says: "Pray, for prayer availeth much."

THOSE DOUBTFUL DON'TS

My parents told me not to smoke;
I don't.

Nor listen to a naughty joke;
I don't.

They told me it was wrong to wink
At handsome men, or even think
About intoxicating drink;
I don't.

To dance or flirt was very wrong;
I don't.

Wild girls chase men and wine and song;
I don't.

I kiss no men, not even one—
In fact, I don't know how it's done;
You wouldn't think I have much fun;
I don't.

—Life.

AT LAST

"I am sorry to tell you," said the doctor, looking down at the man in bed, "that there is no doubt you are suffering from smallpox."

The patient turned on his pillow and looked up at his wife.

"Julia," he said in a faint voice, "if any of my creditors call, tell them that at last I am in a position to give them something."—Drug Trade Weekly.

MUCH IN LITTLE

A baby will make love stronger, days shorter, nights longer, bank roll smaller, home happier, clothes shabbler, the past forgotten and the future worth living for.—Office Topics.

The
Management
of an
Infant's Diet

In extreme emaciation, which is a characteristic symptom of conditions commonly known as

Malnutrition, Marasmus or Atrophy

it is difficult to give fat in sufficient amounts to satisfy the nutritive needs; therefore, it is necessary to meet this emergency by substituting some other energy-giving food element. Carbohydrates in the form of maltose and dextrins in the proportion that is found in

MELLIN'S FOOD

are especially adapted to the requirements, for such carbohydrates are readily assimilated and at once furnish heat and energy so greatly needed by these poorly nourished infants.

The method of preparing the diet and suggestions for meeting individual conditions sent to physicians upon request.

MELLIN'S FOOD COMPANY,

BOSTON, MASS.



Read the Herald Book Reviews—"The function of an education should be to enable one to know the difference between good and bad books."

A Real Doctors' Hope—On page 60 will be found an announcement of great interest to every doctor who desires to make a safe, conservative investment with a company of known stability and worth. Write for particulars today.

Heart Tonic—"I have prescribed and dispensed Cactina Pillets as a heart tonic in functional and organic diseases," writes Dr. H. F. Beckham, "and Seng in atonic gastric disturbances for nearly twenty years without a disappointment therapeutically."

There has been no real important addition to the vegetable materia medica for a generation or more until the action of a species of Leptotaenia has been proven during the influenza epidemic of 1918 and 1919 to have almost specific action in this disease and in preventing its respiratory complications. It is now well recognized in many parts of the country that it is practically a specific in pneumonia and other acute respiratory conditions when administered early and persistently until the danger point has passed. Syrup Leptinol is made from this Leptotaenia and has earned the title of "The Respiratory Specific."

A Thought for Today—"The chief charm of Christmas is its simplicity. It is a festival that appeals to everyone, because every one can understand it. A genuine fellowship pervades our common life—a fellowship whose source is our common share in the gift of the world's greatest life which was given to the whole world."—Arthur Reed Kimball.

This is Timely-Many users regard Calcidin as the greatest of winter remedies, barring none. Certainly the general need for it is such as to entitle it to an outstanding position. The Abbott Laboratories, Chicago, supply it, as in past years, to meet a heavy seasonal demand. It is also known chemically as iodized calcium, being a compound of iodine and basic lime. In general, Calcidin serves where the iodides before its advent were commonly used. It may wisely be given in their stead for the reason that it is better borne. Seldom if ever does it distress the stomach as the inorganic iodides are wont to do, nor give rise to iodism acne. But its best work is done in acute respiratory ailments. It is effective in bronchitis, whether acute or chronic. Experience shows that pneumonia is less likely to follow in influenza when it is given; in one series of more than 1800 cases pneumonia did not develop in a single instance. For catarrhal croup there is no better remedy, pushed to effect. Being readily assimilated, it makes the quick forceful impress necessary in this dangerous disease of the young. Calcidin is now available in troches, with anesthesin, a topical analgesic like cocaine but virtually non-toxic. The troches are excellent wherever there is throat soreness or irritation leading to cough.

Beebe Vaccine No. 30

Respiratory Vaccine (Mixed)

(Respiratory Bacterin, Catarrhal combined)

The value of Beebe Vaccine No. 30 (Respiratory Vaccine) lies not alone in its efficacy as a satisfactory treatment for colds and respiratory infections, but also as an immunizing agent against those more serious diseases which frequently develop as complications, such as bronchial and lobar pneumonia, middle ear infections, sinusitis, influenza, laryngitis, bronchitis, pleuritis and tuberculosis.

RESPIRATORY VACCINE, NO. 30

BEEBE LABORATORIES, INC., Argyle Bldg., Kansas City, Mo.

Home Office and Laboratories, St. Paul, Minn.

New Sex Book—A practical, common sense, plainspoken little book on the sexual functions, by Mary Ware Dennett. Price, 25c, postpaid. Address Book Department, Medical Herald, Kansas City, Mo.

Iron and Arsenic-When you give iron and arsenic per os, action is slow, more or less uncertain, results often unsatisfactory. But after the intravenous injection of Loeser's Intravenous Solution of Iron and Arsenic, there is an average r. b. c. increase of 150,000. There is also immediate improvement in the general condition of the patient. The technic is so simple and safe, it can be done in the office or at the bedside. No dangerous or depressing after effects. Patients do not know what medication is being given, are easily and absolutely controlled. Intravenous therapy assures satisfactory results. Employ Loeser's Intravenous Solution of Iron and Arsenic in anemia, syphilis, psoriasis, tuberculosis, malaria, pellagra, pericarditis, neurasthenia. Clinical reports, reprints, complete list of intravenous solutions, directions for use, prices, etc., will be sent to any physician on request. New York Intravenous Laboratory, 100 W. 21st St., New York.

The Romance of Quinine—Cinchona was discovered in Peru by jesuit missionaries some time between 1600 and 1630. It was introduced in Europe soon afterward. In 1638, Ana, Countess of Cinchon, wife of the viceroy of Peru, was cured of malaria by the powdered bark. She was instrumental in having the drug introduced in Spain. From Spain the knowledge and use of the drug spread into Europe and countries under European control. In 1820 Pelletier

and Caventou, professors in the Paris School of Pharmacy, isolated quinine. In 1859, Markham, a professional traveler, visited Peru and noticed that the cinchona trees were being decimated. He induced the British government to plant the tree in India. He was commissioned to do the work and set out vast groves. Quinine did much to win India to civilization. Without it Egypt could not have been won. Sir Clements R. Markham, traveler, historian, explorer, writer, and late president of the Royal Geographical Society, died not long ago. He was burned to death by the upsetting of a candle by the light of which he was reading in bed. Civilization owes much to him. Quinine has played its part in American history. Its value as an anti-malarial has long been recognized, but its disagreeable taste was dreaded and abhorred by the sick. Many attempts were made to administer quinine palatably, but with little or no success, until, in 1900, Eli Lilly and Company of Indianapolis, nearly three hundred years after the discovery of cinchona and eighty years after the isolation of quinine, introduced Coco-Quin-The advantages of a palatable liquid product containing a definite amount of quinine in each teaspoonful are obvious. A child will take Coco-Quinine and lick the spoon, and yet each average teaspoonful, 96 minimes, contains two grains of true, unchanged quinine sulphate. Under a lens the crystals can be seen suspended in the syrup. The Lilly product is the original chocolate quinine, dependable and palatable. Many physicians insist upon this product because of the character of the house whose label it bears, the pharmaceutical excellence of the product, and the fact that it is the original product.

Arsphenamine products should be:

Readily Soluble
Practically Free from Toxicity
Easy of Administration

NEOSALVARSAN

(NEOARSPHENAMINE-METZ)

possesses all of these qualities.

Order by either name, and if your local dealer cannot supply you order direct from

H. A. METZ LABORATORIES, Inc.

122 Hudson Street

New York City

For deafness drop glycerin in the ear. If from old age insert a cotton pledger; press it well back.

In Whooping Cough and croup Syrup Leptinol has been proven to be unexcelled by any other remedy.

Migraine—Peacock's Bromides is a preparation of the bromides of sodium, potassium, ammonium, calcium and lithium and will relieve with gratifying promptitude the periodical headache and vomiting of migraine. A teaspoonful should be given every two or three hours until relief is obtained.

Treatment of Hemorrhage-Recognizing the fact that the utility of Adrenalin in therapeutics hinges upon its remarkable contractile effect upon the small blood vessels, the physician readily accepts it as the most available styptic we have. Its action is manifested whether it be applied directly to the exposed vessel, administered subcutaneously in the bleeding area, or, as in intestinal hemorrhage, given intra-venously. When applied locally the response is so vigorous that the tissue is actually blanched; and in combination with local anesthetics it prevents excessive bleeding during and after operations on mucous membranes and other structures. In the advertising section of this issue the reader will find the fourth of a series of little essays on "Adrenalin in Medicine," in which the topic discussed is "The Treatment of Hemorrhage." While most practitioners are more or less familiar with the therapeutics of Adrenalin, a perusal of this brief article will serve to refresh the memory of any one who has momentarily lost sight of this remarkable and dependable agent in minor surgery. A notable point that may have been overlooked is that Adrenalin not only controls bleeding by vaso constriction, but it also shortens the coagulation period, whereby it occupies a distinctively unique position among hemostatics.





"Good Things to Come"—Be sure to read the list of original articles shortly to appear in this magazine. You will find a widely varied list of interesting topics. See adv. page 68.

"Poems the Doctor Should Know"—16 pages, 45 poems of war, love and patriotism, including the immortal poem, "In Flanders' Fields," by McCrae, and several answers to its challenge. Price 10 cents a copy, three for 25 cents. The Medical Herald, Ridge Building, Kansas City, Mo.

To Herald Subscribers-Please bear in mind that our subscription rate will be advanced to TWO DOL-LARS per year on January 1st. You may subscribe for one to five years at the dollar rate, if you wish, providing you do so before December 31. "A word to the wise," etc. Do it today.

Constipation After Surgical Operations—Prunoids may be employed after surgical operations with every confidence in their power not only to prevent the paresis of the bowel, which frequently follows abdominal surgery, but also to overcome this condition when it develops. Used properly Prunoids incite the physiologic activity of the intestinal canal and import tone to the muscular structures of the intestine. They are especially adapted, therefore, for relieving the bowel condition that often follows abdominal operations, and may be relied upon to restore the intestines to their normal function.

Preparations for Respiratory Disease Control—The Surgeon-General of the Army is making preparations for the control of the diseases transmitted by discharges of the respiratory tract and the reduction of their mortality during the coming winter among American troops. Experiments carried on at the Army Medical School on animals indicate that the pneumococcus vaccine produces a considerable degree of protection for a short duration of two months. It is recommended to the Medical Corps, therefore, that this vaccine, which is given in three doses like the triple typhoid vaccine, be administered in the Army during the month of December. The pneumococcus vaccine is administered only on a voluntary basis to groups of soldiers who are willing to allow themselves to be vaccinated and observed as to the benefits arising from its use.

The Irritability and Insomnia of System Infections -In marked systemic infections, such as typhoid fever, the irritability and insomnia so often a part of the clinical picture may become so disturbing as to necessitate sedatives. If the patient is a child or a weak woman there is more than ordinary need for exercising care against the employment of a sedative that will produce depression, especially of the cardiac

function. An agent of sedative power that is of exceptional value in patients of this character is Pasadyne (Daniel). It is the concentrated tincture of passiflora incarnata and may be used without bad after-effects. It produces relief from the extreme nervous irritability of these infections and brings sleep. Its freedom from untoward effects makes it of distinctive usefulness in the case of children or women much reduced. With a large part of the profession Pasadyne (Daniel) is the sedative of choice. A sample bottle may be obtained by addressing the laboratory of John B. Daniel, Inc., Atlanta, Ga.

Gonorrhoea CITO

A quick remedy for acute Gonorrhoea.

CHLORINE PRODUCTS CO.

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In Acne DERMATONE Does ZEMATOL Does in Eczema

Use Them and Prove Them

Backed by 25 years of successful clinical experience.

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